



DEPARTMENT OF THE NAVY

COMMANDER
NAVY REGION, MID-ATLANTIC
6506 HAMPTON BLVD.
NORFOLK, VA 23508-1273

IN REPLY REFER TO:

COMNAVREGMIDLANT/SOPA (ADMIN)
HRINST 11320.11
PM Public Safety

15 MAY 2001

COMNAVREG MIDLANT SOPA(ADMIN) HAMPTON ROADS INSTRUCTION 11320.11

Subj: FIRE PREVENTION AND PROTECTION REGULATIONS

- Ref:
- (a) DODINST 6055.5, DOD Fire and Emergency Services Program
 - (b) OPNAVINST 11320.23 Series, Shore Activities Fire Protection and Emergency Services Program
 - (c) NAVFAC P-1021, Navy Shore Establishment Fire Protection/Prevention Program (Feb 1989)
 - (d) MIL-HDBK 1008C, Fire Protection for Facilities Engineering Design and Construction
 - (e) DODINST 4145.19-R-1, Storage and Materials Handling
 - (f) OPNAVINST 1700.9 Series, Child Development Programs
 - (g) NAVAIR 00-80R-14, NATOPS U.S. Navy Aircraft Firefighting and Rescue Manual
 - (h) NAVAIR 00-80T-109, Aircraft Refueling NATOPS Manual
 - (i) NAVSEAINST OP-5, Ammunition and Explosives Ashore Safety Regulations for Handling, Storing, Production, Renovation and Shipping
 - (j) NAVSEAINST OP-2165, Navy Transportation Safety Handbook for Ammunition, Explosives and Related Hazardous Materials
 - (k) NAVFAC MO-117, Maintenance of Fire Protection Systems
 - (l) MIL-HDBK 1005/13, Hazardous Waste Storage
 - (m) MIL-HDBK 1032/2, Covered Storage
 - (n) MIL-HDBK 1130, Inactivation, Caretaker Maintenance, Reactivation, and Closure of Shore Facilities
 - (o) LANTNAVFACENENGCOMINST 11320.6 Series, Installation of Fire Protection Systems
 - (p) Atlantic Division Fire Prevention Program Handbook (Jan 96)
 - (q) U.S. Army Corps of Engineers EM 385-1-1, Safety and Health Requirements Manual
 - (r) SECNAVINST 5100.13 Series, Tobacco Prevention Program in the Navy and Marine Corps
 - (s) COMNAVREGMIDLANT/SOPA(ADMIN)HRINST 5400.1 Series, SOPA Manual
 - (t) OSHA Standard 29 CFR 1910, Occupational Safety and Health Codes
 - (u) National Fire Protection Association Fire Codes and Standards (Current Edition)
 - (v) ASME/ANSI A17.1B, Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks

15 MAY 2001

1. Purpose. To promulgate Fire Prevention and Protection regulations for the Navy Region, Mid-Atlantic. These regulations are designed to minimize the loss of life and property due to fire.

2. Cancellation. Below listed directions are hereby canceled.

a. COMNAVBASENORVA/SOPA (ADMIN) HAMPINST 11320.11, Fire Prevention and Fire Protection Program

b. DAMNECKBASEINST 11320.2B, Fire Bill and Fire Prevention Manual

c. FUELDINST 11320.1A, Craney Island Fire Prevention Instruction

d. NASOCEANAINST 11320.6A, Fire Prevention Regulations and Instruction Bill

e. NAVPHIBASELCREEKINST 11320.1D, Fire Prevention Regulations and Instructions

f. NAVSHIPYDNORINST P11320.6, Fire Prevention and Instructions

g. WPNSTAYORKTOWNINST 11320.3E, Fire Protection and Prevention Manual

3. Policy

a. The provisions of this instruction apply to all areas, buildings, structures, aircraft, and shops undergoing availabilities within the area of responsibility of the Naval Station (NAVSTA), Norfolk; Fleet Combat Training Center Atlantic (FCTCLANT), Dam Neck; Naval Amphibious Base (NAVPHIBASE), Little Creek; Norfolk Naval Shipyard, Portsmouth (NAVSHIPYD Norfolk); Naval Air Station (NAS), Oceana; Naval Weapons Station (WPNSTA), Yorktown; Naval Support Activity (NAVSUPPACT), Norfolk; and the surrounding installations and areas under their jurisdictions.

b. This instruction shall not be construed as amending or altering any regulation, instruction, or directive promulgated by higher authority. If conflicts arise between the listed references the more stringent shall apply.

4. Discussion. This instruction is issued, in support of references (a) through (d) in order to protect life and property. It defines the functions, duties and responsibilities of Navy Regional Fire Rescue Hampton Roads, and other supporting organizations for the fire protection of the above listed facilities.

15 MAY 2001

5. Responsibilities

a. Program Manager, Regional Public Safety, NAVPHIBASE Little Creek is assigned as the authority having jurisdiction for the implementation of the Regional Fire Prevention and Protection requirements. The program will be planned and administered by the Director, Navy Regional Fire Rescue Hampton Roads.

b. The Director, Navy Regional Fire Rescue Hampton Roads is responsible for the management, control, and coordination of the Fire Prevention program and will develop and promote a comprehensive Fire Prevention program to meet the requirements of this instruction. The Director will establish a Fire Prevention Division, which, in turn, will be responsible for the fire awareness training and education of the various personnel within the Mid-Atlantic region. This training and education process will utilize a pro-active helpful approach rather than relying exclusively on the inspection process as a means of compliance. This includes, but is not limited to, training classes and seminars, demonstrations and presentations, indoctrination's, fire drills, building and area inspections, active participation in pre-construction conferences, providing technical assistance, inspections prior to hot work, and support to any activity that provides an awareness of the dangers of fire.

c. Installation Commanders, Commanding Officers, Officers-in-Charge, Department Heads, Special Assistants, and Supervisors who have responsibility for control over personnel, operations, facilities, and equipment within the various installations of the Mid-Atlantic Region are responsible for compliance and implementation of these regulations. They will be held accountable for fire incidents that occur in areas under their control. This in no way, however, relieves individuals of their responsibility to strictly observe all established fire prevention practices and report any and all fire hazards or unsafe operations to their immediate supervisor.

d. Commanding Officers and Officers-in-Charge of tenant commands within the Mid-Atlantic Region will ensure their commands comply with and implement regulations contained herein.

6. Action

a. All personnel attached to, employed on, using, or performing work on any of the installations within the Mid-Atlantic Region shall comply fully with this instruction.

b. These regulations cannot, nor are they expected to, cover every contingency or phase of fire prevention. However, these regulations will be sufficiently comprehensive to cover, either in a specific or general way, the fire safety obligations and duties of everyone. The answers to most problems of a more technical nature

COMNAVREGMIDLANT/SOPA(ADMIN)HRINST 11320.11

15 MAY 2001

than those covered by these referenced regulations are available in each Installation Commanders Storefront Fire Prevention Office.

A handwritten signature in black ink, appearing to be 'S. E. Barker', with a long horizontal flourish extending to the right.

S. E. BARKER
Chief of Staff

Distribution (COMNAVBASENORVA/SOPA(ADMIN)HAMPINST 5216.2X)

List I (Less A9,A12,A16,B11,02,07,P,Q)

List IV (Less A21,T)

List V

(250 Copies)

Stocked by NAVPHIBASE Little Creek/COMNAVREG MIDLANT (N1023)

15 MAY 2001

CONTENTS

Paragraph		Page
<u>CHAPTER 1</u>		
<u>ADMINISTRATION AND ENFORCEMENT</u>		
0101	AUTHORITY	1-1
0102	SCOPE	1-1
0103	APPLICATION	1-2
0104	FIRE PROTECTION STANDARDS	1-3
0105	OCCUPANCY	1-3
0106	MAINTENANCE AND TESTING	1-3
0107	ADMINISTRATION	1-4
0108	RECORDS AND REPORTS	1-4
0109	FALSE ALARMS AND FIRES	1-4
0110	TAMPERING WITH FIRE SAFETY EQUIPMENT	1-5
0111	PERMITS AND APPROVALS	1-5
0112	SITE SPECIFIC TELEPHONE NUMBERS	1-6
<u>CHAPTER 2</u>		
<u>DEFINITIONS</u>		
0201	DISCUSSION	2-1
0202	DEFINITIONS	2-1
<u>CHAPTER 3</u>		
<u>GENERAL FIRE SAFETY REQUIREMENTS</u>		
0301	INTRODUCTION	3-1
0302	FIRE WARDEN PROGRAM	3-1
0303	FIRE REPORTING	3-1
0304	FREQUENCY OF FIRE INSPECTIONS	3-2
0305	HAZARD ABATEMENT INSPECTION REPORT	3-2
0306	FIRE HAZARD NOTICES	3-3
0307	LIFE SAFETY HAZARD NOTICE	3-3
0308	FIRE BILLS	3-4
0309	FIRE EXIT DRILLS	3-4
0310	FIRE PREVENTION/SAFETY TRAINING	3-4
0311	FIRE PROTECTION MARKINGS	3-4
0312	STREET CLOSURE	3-5
0313	FIRE LANES	3-6
0314	PARKING AROUND FIRE EQUIPMENT AND EGRESS PATHS	3-6
0315	ELECTRICAL FIRE SAFETY	3-7
0316	VACANT BUILDINGS	3-8
0317	GENERAL HOUSEKEEPING	3-9
0318	PERSONNEL SERVICE ROOMS	3-10
0319	ATTICS AND CONCEALED SPACES	3-10
0320	COMMERCIAL COOKING EQUIPMENT	3-10

15 MAY 2001

Contents

Paragraph		Page
0321	SMOKING RESTRICTIONS	3-11
0322	OPEN FIRES	3-12
0323	DUMPSTER UNITS	3-12
0324	OUTDOOR AREAS	3-13
0325	HOLIDAY DECORATIONS	3-13
0326	SPECIAL EVENTS	3-14
	APPENDIX 3-A STAIRWAY MARKING SIGNS	3-17

CHAPTER 4
MEANS OF EGRESS

0401	GENERAL	4-1
0402	FUNDAMENTAL REQUIREMENTS	4-1
0403	EMERGENCY EXITS	4-2
0404	ILLUMINATION OF MEANS OF EGRESS	4-2
0405	MARKING OF EXITS	4-2
0406	FACTORS AFFECTING EGRESS	4-3
0407	OVERCROWDING	4-3
0408	EMERGENCY LIGHTING	4-3

CHAPTER 5
CONSTRUCTION RENOVATION PLANS REVIEW

0501	INTRODUCTION	5-1
0502	CRITERIA	5-1
0503	FIRE PROTECTION ENGINEERING REVIEW REQUIREMENTS	5-1
0504	OFFICER AND RESIDENT OFFICER IN CHARGE OF CONSTRUCTION RESPONSIBILITIES	5-1
0505	PUBLIC WORKS OFFICER CONSTRUCTION RESPONSIBILITIES	5-2
0506	CONSTRUCTION BATTALION UNIT (CBU) OFFICER CONSTRUCTION RESPONSIBILITIES	5-2
0507	CONTRACTOR RESPONSIBILITIES	5-2
0508	CONSTRUCTION/ALTERATION/RENOVATION	5-3
0509	CONSTRUCTION/ALTERATION/RENOVATION SAFEGUARDS	5-3
0510	CONSTRUCTION/ALTERATION/RENOVATION FIRE PREVENTION MEASURES	5-4
0511	SELF-HELP PROJECTS	5-6
0512	NEW FACILITY OCCUPANCY	5-6
0513	DEMOLITION SAFEGUARDS	5-6

CHAPTER 6
FIRE PROTECTION SYSTEMS/EQUIPMENT

0601	PORTABLE FIRE EXTINGUISHERS	6-1
------	-----------------------------	-----

15 MAY 2001

Contents

Paragraph		Page
0602	FIXED FIRE EXTINGUISHING, DETECTION, AND ALARM SYSTEMS	6-2
0603	FIRE HYDRANT INSPECTIONS, FLUSHING, AND MAINTENANCE	6-5
0604	FIRE HYDRANT CLASSIFICATION AND MARKINGS	6-6

CHAPTER 7
FACILITIES

0701	CLASSIFICATION OF OCCUPANCY	7-1
0702	GENERAL	7-2
0703	ASSEMBLY OCCUPANCIES	7-3
0704	EDUCATIONAL OCCUPANCIES	7-6
0705	HEALTH CARE, DETENTION, AND CORRECTIONAL OCCUPANCIES	7-6
0706	RESIDENTIAL OCCUPANCIES	7-7
0707	MERCANTILE AND BUSINESS OCCUPANCIES	7-8

CHAPTER 8
HAZARDOUS PROCESSES

0801	HOT WORK	8-1
0802	GENERAL	8-1
0803	OPERATIONS REQUIRING PERMIT	8-1
0804	OPERATIONS WITHIN CONFINED SPACES	8-2
0805	EXCEPTIONS TO ISSUANCE OF HOT WORK PERMIT	8-2
0806	HOT WORK SAFEGUARDS	8-2
0807	TAR KETTLES	8-3
0808	APPLICATION OF TAR KETTLE MATERIALS	8-4
0809	SPRAY APPLICATION/OPERATIONS	8-4
0810	CLEANING OF FLOORS AND BOWLING ALLEYS	8-5
0811	REFINISHING OF FLOORS AND BOWLING ALLEYS	8-5
0812	REMOVAL OF UNDERGROUND STORAGE TANKS	8-6

CHAPTER 9
FLAMMABLE AND COMBUSTIBLE LIQUIDS

0901	GENERAL	9-1
0902	CLASSIFICATION OF FLAMMABLE/COMBUSTIBLE LIQUIDS	9-1
0903	DAY TO DAY USE OF FLAMMABLE/COMBUSTIBLE LIQUIDS	9-1
0904	CLEANING OPERATIONS USING FLAMMABLE/COMBUSTIBLE LIQUIDS	9-2
0905	STORAGE CABINETS	9-2
0906	STORAGE IN CONTAINERS AND PORTABLE TANKS	9-3
0907	BULK GENERAL STORAGE OF FLAMMABLE/COMBUSTIBLE LIQUIDS	9-3

15 MAY 2001

Contents

Paragraph		Page
0908	DISPOSAL OF FLAMMABLE/COMBUSTIBLE LIQUIDS	9-3
0909	FLAMMABLE/COMBUSTIBLE LIQUID LEAKS AND SPILLS	9-3
0910	DISPENSING FLAMMABLE/COMBUSTIBLE LIQUIDS	9-4
0911	FUEL DISPENSING NOZZLES	9-4
0912	FLAMMABLE/COMBUSTIBLE LIQUID VALVES AND FAUCETS	9-4
0913	PERSONNEL OPERATING FLAMMABLE/COMBUSTIBLE FUELING EQUIPMENT	9-5
0914	TANK VEHICLES TRANSPORTING FLAMMABLE/COMBUSTIBLE LIQUIDS	9-5
0915	INSPECTION OF TANK VEHICLES	9-6
0916	USE OF FLAMMABLE LIQUIDS IN RADIO/RADAR AREAS	9-7
0917	STORAGE OF GASOLINE POWERED EQUIPMENT	9-7

CHAPTER 10
HEATING APPLIANCES

1001	GENERAL	10-1
1002	PORTABLE SPACE HEATERS	10-1
1003	HEATERS AND HEATING SYSTEMS	10-1

CHAPTER 11
SPECIAL OPERATIONS

1101	GENERAL	11-1
1102	BATTERY CHARGING SHOPS	11-1
1103	DUST EXPLOSION PREVENTION	11-2
1104	INDUSTRIAL OVENS AND FURNACES	11-2
1105	MECHANICAL REFRIGERATION	11-2
1106	COMBUSTIBLE FIBERS	11-2
1107	FIREWORKS	11-2
1108	EXPLOSIVES	11-3
1109	CYLINDER STORAGE, COMPRESSED GAS, AND OXYGEN	11-3
1110	SHIPPING AND TRANSFERRING GAS CYLINDERS	11-4
1111	HAZARDOUS MATERIALS	11-4
1112	LABELING OF HAZARDOUS MATERIALS	11-4
1113	CHEMICALS REACTING WITH WATER	11-6
1114	ORGANIC OILS	11-7
1115	STORAGE OF HAZARDOUS MATERIALS	11-7
1116	STORAGE OF HAZARDOUS WASTE	11-8
APPENDIX 11-A NFPA 704M LABEL		11-9

CHAPTER 12
WATERFRONT FIRE REGULATIONS

1201	GENERAL	12-1
------	---------	------

15 MAY 2001

Contents

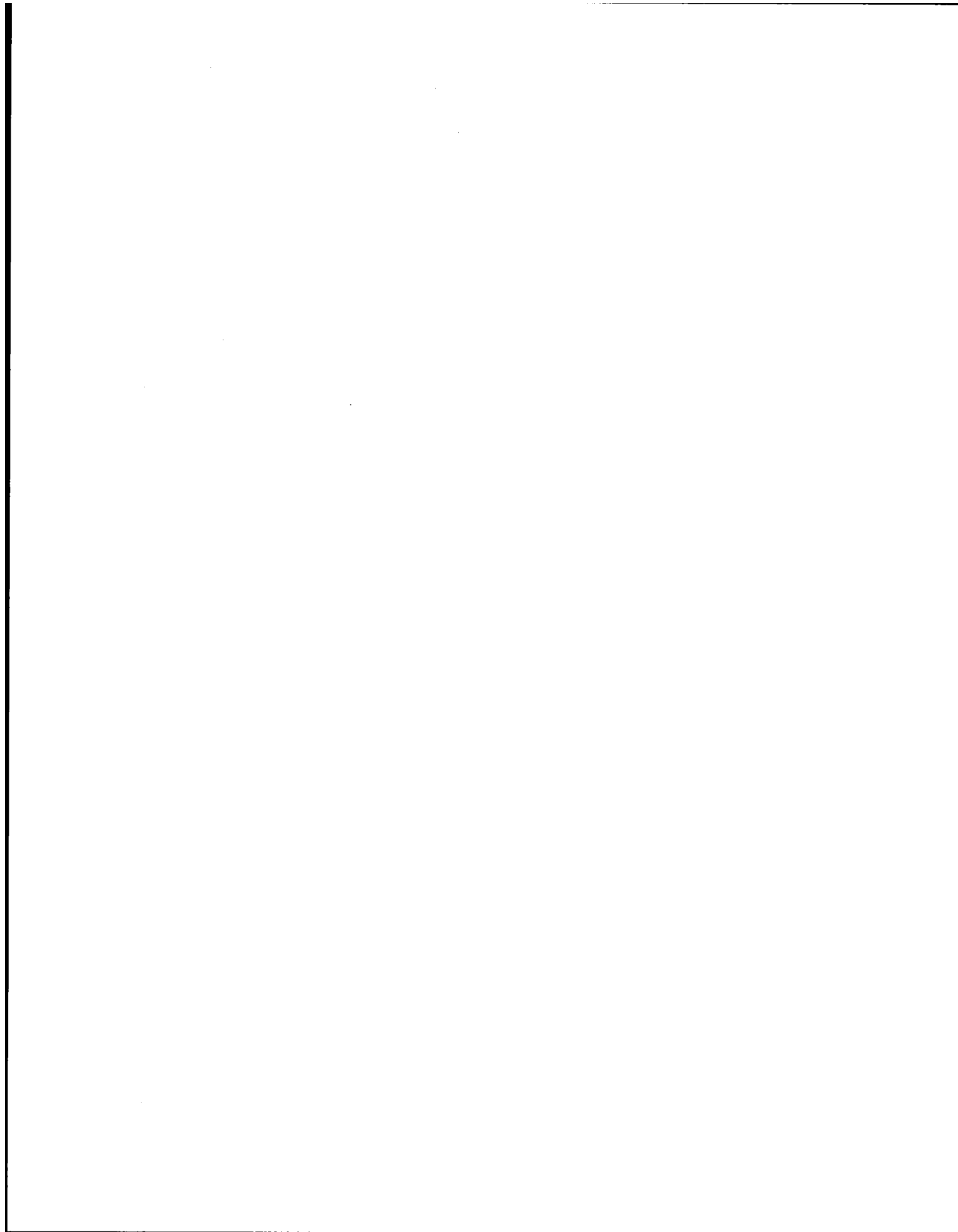
Paragraph		Page
1202	ACTIONS IN CASE OF FIRE	12-1
1203	FIRE LANES ON PIERS	12-2
1204	FUELING OF EQUIPMENT ON PIERS	12-2
1205	DOCKSIDE FUELING OPERATIONS	12-3
1206	LIQUID OXYGEN	12-6
1207	WELDING AND BURNING OPERATIONS	12-6
1208	FIRE PROTECTION RESPONSIBILITIES FOR DECOMMISSIONING SHIPS	12-7
1209	AIRCRAFT OPERATIONS	12-7
1210	HANDLING OF AMMUNITIONS	12-8

CHAPTER 13
AIRCRAFT FIRE REGULATIONS

1301	AIRCRAFT HANGARS	13-1
1302	SPECIFIC APPLICABILITY	13-1
1303	HANGAR FIRE LANES	13-4
1304	ORDNANCE	13-4
1305	AIRCRAFT FUELING OPERATIONS	13-4

CHAPTER 14
FIRE PROTECTION AND PREVENTION FOR SHIPS UNDERGOING
AVAILABILITIES IN THE SHIPYARD

1401	GENERAL	14-1
------	---------	------



15 MAY 2001

CHAPTER 1ADMINISTRATION AND ENFORCEMENT0101 AUTHORITY

a. Program Manager, Regional Public Safety, NAVPHIBASE Little Creek is assigned as the authority having jurisdiction for the implementation of the Regional Fire Protection and Prevention program, and all matters regarding fire protection/prevention requirements. The program will be planned and administered by the Director, Navy Regional Fire Rescue Hampton Roads.

b. Authority to take appropriate steps for the prevention of fires is further delegated to Installation Commanders, Commanding Officers, Officers-in-Charge, Department Heads, Special Assistants, and Supervisors who have responsibility for control over personnel, operations, and equipment, and will be held accountable for incidents that occur in areas under their control. This in no way relieves individuals of their responsibility to strictly observe all fire precautions and to immediately report any unsafe fire conditions to their supervisor. Supervisors will halt any operation that places personnel, facilities, or equipment in imminent danger, and shall take immediate corrective action and notify their Storefront Fire Department.

c. Installation Commanders, Commanding Officers and Officers in Charge may establish additional or more stringent regulations as necessary to control hazards unique to their activity.

0102 SCOPE

a. The provisions of this instruction are applicable to:

(1) The inspection of buildings, processes, equipment, systems, and other fire-related life-safety situations.

(2) The investigation of fires, explosions, hazardous materials incidents, and other related emergency incidents handled by their Storefront Fire Department.

(3) The review of construction plans, drawings, and specifications for life safety systems, fire protection systems, access, water supplies, processes, hazardous materials, and other fire and life safety issues.

(4) The fire and life safety education of employees, responsible parties, and the general public.

15 MAY 2001

(5) Existing occupancies and conditions, the design and construction of new buildings, remodeling of existing buildings, and additions to existing buildings.

(6) The design, alteration, modification, construction, maintenance, and testing of fire protection systems and equipment.

(7) Access requirements for Storefront Fire Department operations.

(8) Hazards from outside fires in vegetation, trash, building debris, and other materials.

(9) The regulation and control of special events including, but not limited to, exhibits, trade shows, and other similar special occupancies.

(10) The interior finish, decorations, furnishings, and other combustibles that contribute to fire spread, fire load, and smoke production.

0103 APPLICATION

a. These regulations apply to all activities within the Mid-Atlantic Region area of responsibility.

b. Each site-specific location will have instructions, in addition to this directive. These additional instructions are site specific and in accordance with the region wide regulations and references (a) through (v).

c. This instruction applies to both new and existing conditions. In various chapters there are specific provisions for existing facilities that may differ from those for new facilities.

d. Additions, alterations, or repairs to any building will conform to that required of a new building without requiring the existing building to comply with all the requirements of this Code. Additions, alterations, or repairs will not cause an existing building to become unsafe or adversely affect the performance of the building as determined by the authority having jurisdiction.

e. Where two or more classes of occupancy occur in the same building or structure, and are so intermingled that separate safeguards are impracticable, means of egress facilities, construction, protection, and other safeguards will comply with the most restrictive fire safety requirements of the occupancies involved.

15 MAY 2001

0104 FIRE PROTECTION STANDARDS

a. All activities are required to comply with the regulations contained in this instruction, Department of Defense (DOD), and Occupational Safety and Health Administration (OSHA) standards.

b. In the absence of Navy, DOD, or OSHA regulations governing a specific topic, the Navy will conform to the standards contained in reference (u).

c. Fire Standards of Navy, DOD, or NFPA that exceed the requirements of OSHA will have precedence over OSHA standards. In cases of conflicting instructions between Navy, DOD or OSHA, the more stringent requirement shall be met.

0105 OCCUPANCY

a. Existing buildings that are occupied at the time of adoption of this instruction will remain in use provided:

(1) The occupancy classification remains the same.

(2) There exists no condition deemed hazardous to life or property that would constitute an imminent danger.

b. Buildings or portions of buildings will not be occupied during construction, repair, or alteration if the required means of egress are impaired, or required fire protection systems are out of service, unless suitable arrangements can be made and approved by the Storefront Fire Department.

c. CHANGES OF OCCUPANCY. In any building or structure, whether necessitating a physical alteration or not, a change from one occupancy classification to another, or from one occupancy sub-classification to another sub-classification of the same occupancy, will be permitted only if such building or structure conforms with the requirements of this instruction applying to new construction for the proposed new use. Occupancy and sub-classifications, as defined, are in accordance with reference (u).

0106 MAINTENANCE AND TESTING

a. Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this instruction, such device, equipment, system, condition, arrangement, level of protection, or other feature will thereafter be permanently maintained unless this instruction exempts such maintenance.

b. Every required automatic sprinkler system, fire detection and alarm system, smoke control system, exit lighting, fire door, and

15 MAY 2001

other item of equipment required by this instruction will be continuously maintained in proper operating condition.

c. Any equipment requiring test or periodic operation to assure its maintenance will be tested or operated as specified by the appropriate standards.

d. ALARM AND FIRE DETECTION SYSTEMS. Fire alarm signaling equipment will be restored to service as promptly as possible after each test or alarm and will be kept in normal condition for operation. Equipment requiring rewinding or replenishing will be rewound or replenished as promptly as possible after each test or alarm.

e. PERIODIC TESTING OF EMERGENCY LIGHTING EQUIPMENT. Each command will ensure a functional test is conducted on every required emergency lighting system at 30-day intervals for a minimum of 30 seconds. An annual test will be conducted for the 1 1/2-hour duration. Equipment will be fully operational for the duration of the test. Written records of testing shall be kept by the activity.

f. ELEVATOR TESTING. Elevators will be subject to routine and periodic inspections and test as specified in reference (v).

0107 ADMINISTRATION

a. The Director, Navy Regional Fire Rescue Hampton Roads is responsible for administration of the Fire Protection and Fire Prevention Program. The program encompasses fire prevention, providing structural, aircraft, shipboard fire protection, directing fire suppression, rescue, and investigative service operations.

b. In addition, the Storefront Fire Department will be responsible for administering a Fire Safety and Prevention Training program.

0108 RECORDS AND REPORTS

a. The Storefront Fire Departments will keep a record of all fire prevention inspections, including the date of such inspections, and a summary of any violations found to exist, the date notices are served, and a record of the final disposition of all violations.

b. All records required to be kept will be maintained until their usefulness has been served.

0109 FALSE ALARMS AND FIRES

a. No person will deliberately, or through negligence, set fire to, or cause the burning of, any combustible material in such a manner as to endanger the safety of any person or property.

15 MAY 2001

b. No person will deliberately or maliciously turn in an alarm of fire when in fact that person knows that no fire exists.

c. It will be a violation of this instruction for any person to willfully make any false, fraudulent, misleading, or unfounded report or statement to any Regional Fire Department, or to willfully misrepresent any fact for the purpose of interfering with the orderly operation of any Regional Fire Department, or with the intention of misleading any Regional Fire Department personnel.

d. Occupants of buildings involved in a fire will assist in the evacuation of personnel and property and render such help as requested by the Incident Commander or their representative.

0110 TAMPERING WITH FIRE SAFETY EQUIPMENT

a. No person will render any portable or fixed fire extinguishing system, or device, or any fire warning system inoperative or inaccessible, except as may be necessary during emergencies, maintenance, drills, or prescribed testing.

b. No person will render a system or device inoperative during an emergency unless by direction of the Incident Commander.

c. No person will reset or silence any fire alarm or fire protection system unless qualified to do so.

0111 PERMITS AND APPROVALS

a. Storefront Fire Departments are authorized to establish and issue permits, certificates, notices, and approvals, or orders pertaining to fire control, and fire hazards as established in this instruction.

b. Storefront Fire Departments may revoke a permit or approval issued if any violation is found upon inspection, or in case there have been any false statements or misrepresentations submitted in the application or plans, on which the permit or approval was based.

c. A permit issued shall continue until revoked or for the period of time designated on the permit.

d. A copy of the permit will be posted or otherwise readily accessible at each place of operation.

e. Storefront Fire Departments have the authority to issue permits for the following operations within their jurisdiction:

(1) Bonfires and Outdoor Rubbish Fires. Kindling or maintaining any open fire or a fire in any public street, alley, road,

15 MAY 2001

or other public or private ground. Instructions and stipulations of permit will be adhered to.

EXCEPTION: Cooking fires are exempt and do not require a permit.

(2) Bowling Lanes. Refinishing and resurfacing of bowling lanes and bowling pin refinishing.

(3) Cutting and welding

(4) Ship Fueling Operations

(5) Aircraft On-load/Off-load Operations Pierside

(6) Aircraft Fly-On/Fly-Off Operations Pierside

(7) Special Events (Fairs, festivals, and shows)

0112 SITE SPECIFIC TELEPHONE NUMBERS

a. The following is the listing for the site specific Site Managers, Fire Prevention offices, and Emergency Communication Centers/Fire Dispatch.

(1) LITTLE CREEK STOREFRONT FIRE DISTRICT

(a) Site Manager: 462-7370

(b) Fire Prevention: 462-7535

(c) Fire Emergency/Fire Dispatch: 462-4444/4445

(d) Fire Dispatch non-emergency line: 462-4445

(2) PENINSULA STOREFRONT FIRE DISTRICT: WPNSTA Yorktown and Cheatham Annex

(a) Site Manager: 847-7871

(b) Fire Prevention: 847-7872

(c) Fire Emergency/Fire Dispatch: 887-4911

(d) Fire Dispatch non-emergency: 887-4676

(3) PORTSMOUTH STOREFRONT FIRE DISTRICT: NAVSHIPYD Norfolk, Naval Medical Center (NAVMEDCEN), Portsmouth, St. Juliens Creek Annex, and Craney Island Fuel Depot.

(a) Site Manager: 396-3557

15 MAY 2001

NAVSHIPYD NORFOLK and ST JULIANS CREEK ANNEX

- (b) Fire Prevention: 396-3338
- (c) Fire Emergency/Fire Dispatch
 - 1. On Base: 911
 - 2. Off Base or Commercial Phone: 396-3333
- (d) Fire Dispatch non-emergency: 396-3335

NAVMEDCEN PORTSMOUTH

- (e) Fire Prevention: 396-3338
- (f) Fire Emergency: 396-3333

CRANEY ISLAND FUEL DEPOT

- (g) Fire Prevention: 396-3338
- (h) Fire Emergency: 322-9911
- (i) Fire Dispatch non-emergency: 322-9086

(4) SEWELLS POINT STOREFRONT FIRE DISTRICT

- (a) Site Manager: 322-2392
- (b) Fire Prevention: 322-2419
- (c) Fire Emergency/Emergency Communications Center:
444-3333
- (d) Emergency Communications Center non-emergency:
444-2324

(5) VIRGINIA BEACH STOREFRONT FIRE DISTRICT: NAS OCEANA and
DAM NECK

- (a) Site Manager: 433-3258

NAS OCEANA

- (b) Fire Prevention NAS Oceana: 433-2407
- (c) Fire Emergency/Fire Dispatch: 433-9111
- (d) Fire Dispatcher non-emergency: 433-2224/3300

COMNAVREGMIDLANT/SOPA (ADMIN) HRINST 11320.11

15 MAY 2001

DAM NECK

- (e) Fire Prevention Dam Neck: 492-6336/7848
- (f) Fire Emergency/Fire Dispatch Dam Neck: 492-6333/6911
- (g) Fire Dispatch non-emergency: 492-6400

15 MAY 2001

CHAPTER 2DEFINITIONS0201 DISCUSSION

Words as defined in this instruction are intended only for use with sections of this instruction. Definitions set forth in any document referenced by this instruction will be the acceptable definition for use of that document only. Where terms are not defined, they will have their ordinary accepted meanings within the context with which they are used.

0202 DEFINITIONS

Addition - An extension or increase in floor area or height of a building or structure.

Approved - Acceptable to the authority having jurisdiction.

Authority having jurisdiction - The organization, office, or individual responsible for approving equipment, an installation or a procedure.

Building - Any structure used or intended for supporting or sheltering any use or occupancy.

Combustible - Capable of undergoing combustion.

Combustible Liquid - Any liquid having a flash point at, or above, 100 degrees Fahrenheit (38 degrees Celsius).

Combustion - A chemical process that involves oxidation sufficient to produce light or heat.

DOD - Department of Defense.

ECC - Emergency Communications Center (see Fire Dispatch).

Emergency - A fire, explosion, or hazardous condition that poses an immediate threat to the safety of life or damage to property.

Exit - That portion of a means of egress that is separated from all other spaces of the building or structure by construction or equipment to provide a protected way of travel to the exit discharge.

Exit Access - That portion of a means of egress that leads to an exit.

Exit Discharge - That portion of a means of egress between the termination of an exit and a public way.

15 MAY 2001

Fire Dispatch - Emergency Fire Dispatch (see ECC).

Fire Door - Frame and door assembly designed for the protection of openings in firewalls and partitions when installed in accordance.

Fire Hazard - Any situation, process, material, or condition that, on the basis of applicable data, may cause a fire or explosion or provide a ready fuel supply to augment the spread or intensity of the fire or explosion and that poses a threat to life or property.

Fire Protection System - Any fire alarm device or system, or fire extinguishing device or system, or combination thereof, designed and installed for detecting, controlling, or extinguishing a fire or otherwise alerting occupants, the Fire Department, or both that a fire has occurred.

Fire Wall - A continuous concrete wall extending from the foundation through and above the roof in a parapet. A Fire partition normally possesses somewhat less fire resistance and does not extend through the roof as does the firewall.

Fire Watch - A person assigned to be in an area for the express purpose of notifying the Fire Department of an emergency, preventing a fire from occurring, extinguishing small fires, or protecting the public from fire or life safety dangers that may occur.

Flammable Liquid - Any liquid having a flash point below 100 degrees Fahrenheit (38 degrees Celsius).

F.M. - Factory Mutual

Hazardous Location - Any situation, process, material, or condition that, on the basis of applicable data, may cause a fire or explosion or provide a ready fuel supply to augment the spread or intensity of the fire or explosion and that poses a threat to life or property.

Incident Commander - The Fire Department official in charge of an emergency incident.

Listed - Equipment or materials included in a list published by an organization acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

May - Term used to state permissive use or alternative method to a specific requirement.

15 MAY 2001

Means of Egress - A means of egress is a continuous and unobstructed way of exit travel from any point in a building or structure to a public way and consists of three separate and distinct parts; the exit access, the exit, and the exit discharge.

NFPA - National Fire Protection Association

Noncombustible Material - A material that, in the form in which it is used and under the conditions anticipated, will not aid combustion or add appreciable heat to an ambient fire.

Occupancy - The purpose for which a building or portion thereof is used or intended to be used.

Occupant Load - The total number of persons that may occupy a building or portion thereof at any one time.

OSHA - The Occupational Safety and Health Administration

Permit - A document issued by the authority having jurisdiction for the purpose of authorizing performance of a specified activity.

Process - The manufacturing, handling, blending, conversion, purification, recovery, separation, synthesis, or use, or any combination, of any commodity or material.

Shall - Indicates a mandatory requirement.

Should - Indicates a recommendation or that which is advised but not required.

Site Manager - Senior Fire Official at site specific locations.

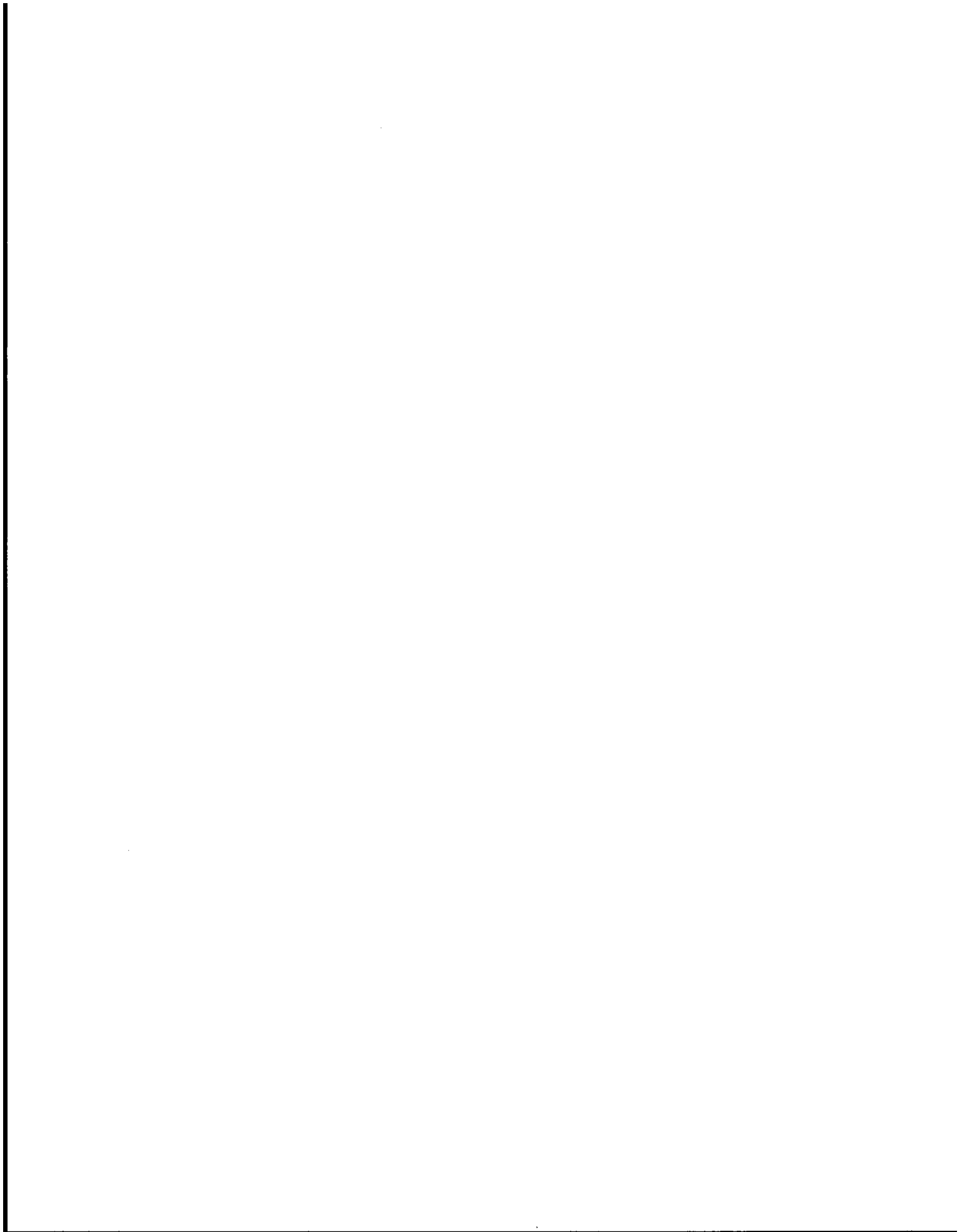
Site Specific - These will be instructions relating exclusively to a particular Fire District.

System - Several items of equipment assembled, grouped, or otherwise interconnected for the accomplishment of a purpose or function.

Temporary Wiring - Approved wiring for power and lighting during a period of construction, remodeling, maintenance, repair, or demolition, and decorative lighting, carnival power and lighting, and similar purposes.

U.L. - Underwriters Laboratories

Will - As used in this instruction means the same as shall.



15 MAY 2001

CHAPTER 3GENERAL FIRE SAFETY REQUIREMENTS0301 INTRODUCTION

a. To ensure an adequate level of fire protection and fire prevention is achieved general fire safety requirements have been established and are in accordance with reference (u).

b. All activities, regardless of occupancy classification, will adhere to these requirements.

0302 FIRE WARDEN PROGRAM

a. Commands/activities will provide a Fire Warden to serve as the primary point of contact for Storefront Fire Departments concerning fire prevention matters. This includes accompanying Fire Prevention Inspectors during facility inspection tours, signing receipt for Storefront Fire Department inspection deficiency reports and ensuring corrective action is taken, coordinating fire evacuation drills and fire safety training with the Fire Prevention representative.

(1) Fire Wardens are the key to the success of this program. A Fire Warden will be assigned at each building/command. Copies of the appointment letter will be sent to the individual, their immediate supervisor, and to the Storefront Fire Prevention Office.

(2) Personnel assigned as Fire Wardens will attend indoctrination by the Fire Prevention Office prior to assuming their duties.

b. Duties of the Fire Warden will be determined and disseminated by each Storefront Fire Prevention Office during the training module.

0303 FIRE REPORTING

a. The person discovering any fire, regardless of magnitude will:

(1) Immediately notify all occupants and guests in the immediate vicinity of the fire.

(2) Notify the Fire Department by using the nearest fire alarm box and notify the ECC/Fire Dispatch (see Chapter 1, paragraph 0112 for telephone numbers). All fires are to be reported including extinguished fires. Fire alarm pull boxes may not always be operational due to maintenance or malfunction; therefore, when reporting a fire, always activate the pull station/box and follow up with a telephone call to the ECC/Fire Dispatch.

15 MAY 2001

(3) If time permits, close doors and windows to confine the fire and prevent drafts. Do not endanger yourself or others in this effort.

(4) Use portable fire extinguishers to extinguish the fire pending arrival of the Fire Department only if such action does not endanger you or others.

b. No person will make, issue, post, or maintain any regulation or order, written or verbal, that would require any person to take any unnecessary delaying action prior to reporting a fire to the Fire Department.

0304 FREQUENCY OF FIRE INSPECTIONS

a. Qualified personnel shall perform Inspection/Fire Risk Management Surveys. Frequencies of these surveys will be site specific and established by the Storefront Manager. The inspection frequencies will be determined after completion of local fire risk surveys that will reveal occupancy hazards, fire loading and mission criticality. However, the following minimum requirements apply:

(1) Weekly. Site inspections of major construction/renovation projects.

(2) Monthly. Clubs, places of public assembly, educational non-adult, extra hazardous operations, hospitals, and day-care centers.

(3) Bimonthly. Mercantile and recreation areas.

(4) Quarterly. Industrial, transportation, maintenance, flammable gas and liquid facilities, dormitories, automated data processing and communication equipment areas.

(5) Semiannual. Administration areas, business, adult schools, storage and mobile facilities.

(6) Annual. Family housing, special structures, and all other structures not inspected weekly, monthly, bimonthly, quarterly, or semiannually.

0305 HAZARD ABATEMENT INSPECTION REPORT

a. Hazard Abatement Inspection Reports will be provided to all activities inspected if deficiencies were found. This report will indicate types of deficiencies found and recommended corrective action.

b. Activities will respond via Corrective Action Reply Report, or memorandum, to the Fire Prevention Office within 30 days of receipt of inspection report, indicating corrective action taken on each

15 MAY 2001

deficiency and including work order numbers submitted to correct deficiencies that are beyond the scope of activity personnel. Corrective Action Reply Reports will be provided by the Fire Department.

c. Hazard priorities will be assigned to inspection deficiencies, according to the following scale:

(1) Priority I: Serious risk potential to life and/or property.

(2) Priority II: Moderate risk potential to life and/or property.

(3) Priority III: Minor risk potential to life and/or property.

0306 FIRE HAZARD NOTICES

a. Definition. Any situation, process, material or condition that, on the basis of applicable data, may cause a fire or explosion or provide a ready fuel supply to augment the spread or intensity of the fire or explosion and that poses a threat to life or property.

b. Fire Department representatives, who discover hazards during inspections or at any other time constituting immediate danger to personnel and/or property, will issue the activity a Fire Hazard Notice. The activity will take immediate steps to stop the process/work and/or eliminate the hazard.

c. Immediate corrective action will be required upon issuance of a Fire Hazard Notice.

EXCEPTION: At the discretion of the Fire Department, a specified amount of time may be allowed in order to achieve compliance, not to exceed three working days.

0307 LIFE SAFETY HAZARD NOTICE

a. General

(1) Any condition that represents an extreme risk or hazard to the life safety of personnel will be considered as a Life Safety Hazard.

b. Fire Department representatives who discover a Life Safety Hazard will issue the activity a Life Safety Hazard Notice. The activity will take immediate steps to eliminate the hazard.

15 MAY 2001

c. Upon issuance of a Life Safety Hazard Notice, immediate corrective action is required. However, at the discretion of the Fire Department, a specified amount of time may be allowed in order to achieve compliance.

0308 FIRE BILLS

Fire Bills will be conspicuously posted in all buildings, on OFFICIAL Bulletin Boards, and one on each floor.

0309 FIRE EXIT DRILLS

a. A minimum of one fire exit drill will be conducted annually by all activities, except for occupancies requiring additional drills as specified by Chapter 7 of this instruction.

b. Drills will be conducted in cooperation with the Storefront Fire Prevention Office. A copy of all fire drill documentation will be provided to the activity.

0310 FIRE PREVENTION/SAFETY TRAINING

a. All activity personnel are required to attend annual fire prevention/ fire safety training. This training will include general fire safety, on-the-job fire prevention, and the use and operation of portable fire extinguishers in accordance with reference (t).

b. Additional training will be provided upon request to include, but not be limited to; fire safety orientation for new personnel, home fire safety and prevention, holiday fire safety, and hands-on portable fire extinguisher demonstrations.

c. The Storefront Fire Prevention Office will administer fire prevention/fire safety training.

0311 FIRE PROTECTION MARKINGS

a. PREMISES IDENTIFICATION. New and existing buildings will have address/building numbers placed in a position to be plainly legible and visible from the street or road fronting the property. These numbers will contrast with their background. Address numbers will be Arabic numerals or alphabet letters.

b. SHAFTWAY MARKING. Every outside opening accessible to the Fire Department that opens directly on any hoistway or shaftway communicating between two or more floors in a building will be plainly marked with the word "SHAFTWAY" in red letters at least 6 inches high on a white background. Such warning signs will be so placed as to be readily discernible from the outside of the building.

15 MAY 2001

c. STAIRWAY MARKING

(1) SIGNS. Stairs serving four or more stories will be provided with a sign within the enclosure at each floor landing. The sign will indicate the floor level, the terminus of the top and bottom of the stair enclosure, and the identification of the stair. The sign will also state the floor level of and the direction to exit discharge. (Appendix 3-A) The sign will be inside the enclosure located approximately 5-feet above the floor landing in a position that is readily visible when the door is in the open or closed position.

(2) The sign will be painted or stenciled on the wall or on a separate backing securely attached to the wall.

(3) Letters and numerals will be of bold type and of a contrasting color to the background.

(4) The stairway identification letter will be placed at the top of the sign in minimum 1-inch high bold block lettering.

(5) Roof access or no roof access will be designated by the words "Roof Access" or "No Roof Access" and placed under the stairway identification letter. Lettering will be a minimum of 1-inch high bold block lettering.

(6) The floor level number will be placed in the middle of the sign in minimum 5-inch high bold block lettering. Mezzanine levels will have the letter "M" or other appropriate identification letter preceding the floor number, while basement levels will have the letter "B" or other appropriate identification letter preceding the floor level number.

(7) The lower and upper terminus of the stairway will be placed at the bottom of the sign in minimum 1-inch high bold block lettering.

(8) These signs will be properly maintained.

0312

STREET CLOSURE

a. Definition: Any street or road that is completely or partially closed, blocked, or otherwise made inaccessible to vehicular traffic.

b. Street closures will be reported to the Storefront ECC/Fire Dispatch Office (see Chapter 1 paragraph 0112 for telephone numbers) in advance of the closure by the command, activity, department, or in the case of contract work, by the Resident Officer In Charge of Construction official responsible for the closure.

c. When reporting street closures the following information will be given:

15 MAY 2001

- (1) Exact street name and area affected.
- (2) Whether completely or partially blocked.
- (3) Duration of closure.
- (4) Reason for closure.
- (5) Name and phone number of responsible party.

d. Upon receiving a report of a street closure, the ECC/Fire Dispatch will immediately notify the Storefront Manager.

0313 FIRE LANES

a. Fire lanes will be provided for all buildings that are set back more than 150-feet from a public road, or exceed 30-feet in height and are set back over 50-feet from a public road.

b. Fire lanes will be not less than 20-feet of unobstructed width, able to withstand live loads of fire apparatus and have a minimum of 13-feet 6-inches of vertical clearance. An approved turnaround for fire apparatus will be provided where an access road is a dead end and is in excess of 150-feet in length. The turnaround will have a minimum centerline radius of 50-feet.

c. Fire lanes will be maintained free of obstructions at all times.

d. Suitable gates, access roads, and/or bridges will be maintained to ALL facilities to ensure Fire Department access in case of fire.

e. Parking of motor vehicles or obstructing fire lanes is prohibited.

f. Fire lanes will be marked with freestanding signs or marked curbs, sidewalks, or other traffic surfaces that have the words "FIRE LANE-NO PARKING" painted in contrasting colors.

g. Pier fire lane requirements are established in Chapter 12 of this directive.

h. Aircraft hangar fire lane requirements are established in Chapter 13 of this directive.

0314 PARKING AROUND FIRE EQUIPMENT AND EGRESS PATHS

a. Parking will not be permitted near buildings that would prevent or obstruct egress from exit.

15 MAY 2001

b. Parking will not be permitted within 15-feet of fire hydrants, including underground fire hydrants.

c. Parking will not be permitted within 3-feet of Fire Alarm boxes or sprinkler system post indicator valves.

d. A 15-foot access clearance will be provided to all Fire Department sprinkler and standpipe connections.

0315 ELECTRICAL FIRE SAFETY

a. This section applies to new, existing, permanent, or temporary electrical appliances, fixtures, or wiring.

b. All electrical wiring, appliances, fixtures, equipment, and wiring will be installed, maintained, and labeled in accordance with reference (u).

c. Defective electrical equipment could result in short circuits and therefore should be checked frequently, and be repaired as necessary by an authorized electrician. Activity personnel can accomplish replacing of outlet and light switch covers.

d. Permanently installed electrical equipment requiring electricity will be installed using permanent wiring. Electrical cord treadles will be used whenever wiring crosses a "path of travel".

e. The use of temporary wiring will be kept to a minimum and never be substituted for permanent wiring, except in temporary installations where it will not be in use for more than 90 working days.

f. The use of surge protectors/power strips for multiple outlet applications is recommended. However, the use of standard, two-wire extension cords is acceptable provided use is kept to a minimum; extension cords are not overloaded, i.e., multiple outlet application; extension cords are not routed beneath floor coverings.

g. Circuits will not be overloaded or over-fused.

h. When a blown fuse has interrupted a circuit or tripped breaker, the source of the problem will be located and corrected prior to restoring power.

i. Electrical breakers in panel-boards shall be properly labeled to indicate circuits/devices that they control. Unused openings are prohibited and shall be covered with a blank plate. Breaker panel doors shall remain closed.

j. Substantial conductors, having low resistance to ground, will be used to ground ALL stationary and portable machines, equipment, and

15 MAY 2001

other devices in which static charges may be generated in the vicinity of flammable gases or vapors.

k. Extension cord lights will not be used as temporary lighting unless equipped with proper globe and guards.

l. Unguarded electrical lamps will be kept clear of combustible materials and will not be allowed to rest against walls, wooden benches, or other combustibles.

m. Fluorescent lights will not be used as "standing lights".

n. Extension cords or lights, and electrically operated tools or devices, together with their connections and fittings, will be properly grounded, inspected frequently, and be maintained in safe working order. All extension cords will be kept dry and free from oil and greases.

o. All vending machines using electrical power will be properly grounded. Motors, compressors, etc., will be kept free from grease and lint. Vending machines and window air conditioners cannot utilize extension cords or temporary wiring.

p. All television and FM antennas will be grounded.

q. Flexible electrical cords when authorized shall not be run through holes in walls, ceiling, floors, doorway, windows, or similar openings.

0316 VACANT BUILDINGS

a. General

(1) Requirements relating to securing, fire protection and fire prevention, and caretaker maintenance of vacant buildings will be in accordance with reference (d).

(2) Activities having charge or control of any vacant building will remove all combustible waste or refuse therefrom and lock, or otherwise secure, all windows, doors, and other openings in the building to prohibit entry by unauthorized persons.

(3) Signs will be posted at the main entrance of the building prohibiting entry and indicating an emergency point of contact with phone number.

(4) Smoking is prohibited in vacant buildings.

EXCEPTION: This section is not intended to apply to facilities or buildings used on a seasonal basis or the temporary vacancy of a building for tenant change or remodeling purposes.

15 MAY 2001

b. Inactivation of Facilities

(1) All required fire protection and fire alarm systems will remain in service.

(2) Provisions will be made to protect wet-pipe sprinkler systems from freezing during cold seasons.

(3) Electrical service will be maintained only to the extent that meets minimum essential power requirements.

(4) Gas service will be shut off outside the building, gas lines bled, and secured.

c. Closure of Facilities

(1) Facilities in a closure status are usually slated to be demolished or transferred to another agency.

(2) Sprinkler systems will remain in service until facility is scheduled for demolition.

(3) Electrical power will be disconnected at the main control panel and service lines removed if practical. Gas service will be disconnected and secured.

0317 GENERAL HOUSEKEEPING

a. All combustible waste material shall be collected regularly, at least daily, at the end of each workday or end of shift, and placed in closed metal containers or removed from the building to avoid significant accumulation of trash.

b. Combustible waste or refuse will be properly stored or disposed of to prevent unsafe conditions.

c. Smoking materials will be cold prior to emptying smoking receptacles.

d. Room exhaust fans will be kept free of dust and dirt accumulations.

e. Trash containers will be constructed of metal or fire resistive materials and kept closed with lids at all times when not in use.

EXCEPTION 1: Lids are not required for trash baskets used in administrative business occupancies or offices.

EXCEPTION 2: Plastic trash containers may be used in galleys or restaurants for wet garbage only.

15 MAY 2001

0318 PERSONNEL SERVICE ROOMS. Lockers serving as clothing lockers will be made of metal and maintained in a clean, orderly condition with adequate ventilation. No materials will be stored on top or underneath the lockers and work clothes that have been saturated with contaminants will be cleaned immediately. Flammable liquids, chemicals, paints, rags, and similar materials will not be stored in clothes lockers.

0319 ATTICS AND CONCEALED SPACES

a. Attic spaces will be kept clean and will not be used for storage of any type of material.

b. Scuttle holes and other openings leading to attics or concealed spaces will be fitted with doors constructed of material similar to those used in the construction of the ceiling and secured when not in use. These doors, hatches, etc. will not be used for ventilation.

0320 COMMERCIAL COOKING EQUIPMENT

a. Commercial cooking equipment that produces smoke or grease-laden vapors will be equipped with an exhaust system in accordance with reference (u).

b. Exhaust systems will be in operation whenever cooking equipment is in use. Use of cooking equipment will be discontinued immediately if any component of the exhaust system (fans, filters, ducts, etc.) becomes inoperable or is removed.

c. Hoods, grease-removal devices, fans, ducts, and other appurtenances will be cleaned at frequent intervals prior to surfaces becoming heavily contaminated with grease or oily sludge. These devices will be inspected a minimum of every six months for certification by a qualified mechanic for cleanliness and operation.

d. The following precautions will be observed when cleaning:

(1) Flammable solvents or other flammable cleaning aids will not be used for cleaning.

(2) At the start of the cleaning process, electrical switches that may be accidentally activated will be locked out.

(3) Care will be taken not to apply cleaning chemicals on fusible links or other detection devices of the automatic fire extinguishing system.

(4) When cleaning procedures are completed, all electrical switches, detection devices, and system components will be returned to an operable state. Cover plates will be replaced and dampers and diffusers will be positioned for proper airflow.

15 MAY 2001

e. Activities will maintain records of the dates of inspection and cleaning of exhaust vent systems.

f. Deep fryers shall be provided with a primary thermostat to limit grease temperature to 410 degrees Fahrenheit maximum and a second back-up thermostat or thermal electrical cut out to limit the temperature to 475 degrees Fahrenheit maximum.

g. Metal covers for deep fat fryers will be readily available in case of a fire.

h. Fire extinguishing systems will be inspected, tested, and maintained in accordance with Chapter 6 of this directive.

0321 SMOKING RESTRICTIONS

a. Smoking will not be permitted, except in designated areas, in any of the following locations:

(1) Explosive areas

(2) On any piers

(3) In any residential quarters, dormitory, or other sleeping facility while in bed

(4) Warehouses, storerooms, transit sheds, packing sections, salvage buildings or areas, in attics and lofts, on roofs, or underneath structures

(5) Theaters, including projection booths, gymnasiums, and auditoriums

(6) Secured structures, battery charging rooms, joiner shops, box factories, photographic laboratories, paint shops and sheds, galleys, carpenter or woodworking shops, or in any place where flammable/combustibles are handled or stored, or where explosive flammable vapors may be present

(7) Barges and lighters loaded with flammable/combustible liquids or materials, in or near cargo holds of ships, on loading ramps, in railroad cars, in beds of trucks or trailers while loading or unloading combustible materials

(8) Within 500-feet of a ship engaged in explosive transfer operations or in any hazardous refueling area

(9) In all areas where chemicals or highly combustible materials are stored or handled

(10) Smoking will be prohibited within 50-feet of:

15 MAY 2001

- (a) Gasoline dispensing operations
- (b) Where bituminous and plastic coatings are being applied
- (c) Flammable/combustible liquid handling or storage areas
- (d) Aircraft parking or hangar areas

(11) In any other area considered a fire hazard by the Fire Department

b. In areas where smoking is permitted, noncombustible ashtrays will be provided.

0322 OPEN FIRES

a. Open burning of any type (excluding cooking fires) will be prohibited without written approval from the Storefront Fire Prevention Office and Storefront Environmental Office. A request for site inspection should be submitted to the Fire Prevention Office at least two weeks prior to the activity.

b. Permitted open fires will be located not less than 50-feet from any structure.

c. A competent person will constantly attend open fires and cooking fires until such fire is extinguished.

d. The Fire Department may prohibit any or all open fires when atmospheric conditions or local circumstances make such fires hazardous.

e. No charcoal burners will be kindled or maintained within any structure, or on combustible balconies, or within 10-feet of combustible patios and buildings on ground floors.

EXCEPTION: Single family dwellings.

f. Only approved charcoal lighter fluids will be used in accordance with manufacturer directions.

g. Gas fired grills will not be operated within any structure, or within close proximity of combustible buildings, which could ignite the structure or allow smoke and products of combustion to enter the buildings.

0323 DUMPSTER UNITS

Dumpsters and other central trash disposal units will not be placed closer than 15-feet to any building or outdoor storage area. Doors or hatches of dumpsters will be kept closed.

15 MAY 2001

0324 OUTDOOR AREAS

a. General Requirements

(1) Adequate fire lanes will be maintained in open storage areas to allow free passage of firefighting vehicles.

(2) Fifteen feet of clear space will be maintained between storage piles and buildings of combustible construction or other combustible storage.

(3) Unsprinkled buildings containing hazardous operations such as woodworking, glazing, painting, or hot work will have at least 50-feet of clear space from the nearest lumber stack.

(4) Outdoor storage may be preferred to storage in combustible buildings lacking fire protection. In such cases, special precautions will be taken for fire safety as required.

(5) Stacks of empty pallets present a severe fire hazard and will be stored in accordance with reference (e).

b. Vegetation such as grass, weeds, and other growth will be kept cut regularly within 50-feet of all buildings, open storage areas, storage piles, or stowed vehicle areas.

c. Trash and debris will not be allowed to accumulate, will be kept 50-feet away from around buildings, open storage areas, storage piles or stowed vehicle areas.

0325 HOLIDAY DECORATIONS

a. General

(1) Christmas trees or similar decorations will not be placed in a position that would obstruct corridors, exit ways, or other means of egress.

(2) Only U.L. Listed or F.M. approved electrical lights and wiring will be used on Christmas trees or as similar decorations. Use of extension cords for holiday lighting will be kept to a minimum.

(3) Open flames such as candles or lanterns will not be placed on or near Christmas trees, curtains, or other similar combustible materials. Candles will be kept in stable, non-combustible

15 MAY 2001

candleholders and will not be left burning unattended. Ensure candles are extinguished by wetting the wicks prior to leaving the area.

b. Natural Cut Decorations

(1) Natural cut Christmas trees will not be permitted in assembly, educational, health care, residential board and care, detention and correctional, mercantile, hotel or dormitory occupancies.

EXCEPTION 1: Living trees with their roots protected by an earth ball may be permitted provided they are maintained in a fresh condition and are not allowed to become dry.

EXCEPTION 2: Trees located in areas protected by an approved automatic sprinkler system.

(2) Natural cut Christmas trees or similar decorations will not be located near heating vents or other fixed or portable heating devices that could cause premature drying or promote ignition.

(3) In occupancies where natural cut trees are permitted, the bottom end of the trunk will be cut off at an angle at least one to two inches above the end to aid water absorption. Trees will be placed in suitable stands with adequate water. The water level will be checked and maintained on a daily basis.

(4) Cut trees, pine branches, and similar foliage and vegetation will be removed from the building within seven days after the holiday, or immediately upon evidence of drying.

c. Artificial Decorations

(1) Artificial Christmas trees or other similar decorations will be labeled, identified, or certified by the manufacturer as being "flame retardant" or "flame resistive".

(2) Electrical ornaments or lights are prohibited on metal artificial trees.

0326 SPECIAL EVENTS

a. Definition: A special event is defined as any ceremony, concert, fair, festival, or any other event characterized by large groups of people gathered for a common purpose.

b. General

(1) Special events will require a site inspection by the Fire Department prior to the start of, and if deemed necessary, during any such event to ensure adequate fire prevention and life safety precautions have been taken.

15 MAY 2001

(2) A Special Event Authorization Permit will be issued by the Fire Department upon completion of the site inspection. This permit will indicate whether the site is approved or disapproved for the event. If disapproved, deficiencies will be indicated on the permit and must be corrected before the event begins.

(3) To ensure an adequate level of fire safety is maintained; the following precautions should be taken:

(a) All fire protection systems and equipment are accessible and in service.

(b) Exit and emergency lighting is functional.

(c) Closed top enclosures or the hanging of parachutes, canvas, or other decorative items from ceilings in sprinkled buildings is prohibited.

(d) All designated exits must allow unrestricted egress during the event. Exit access aisles should be at least 36 inches in clear width and remain unobstructed by chairs, tables, or other objects.

(e) Posted maximum occupant load will not be exceeded.

(f) Combustible materials, hay, straw, shavings, etc. will not be located in any tent. Ensure tents and site are cleaned and inspected prior to securing each day.

(g) The use of pyrotechnic special effects, torches, etc. will require prior approval by the Fire Department. The use of sterno cans, candles on tables, portable cooking equipment, etc., will be in accordance with Chapter 7 of this instruction and will adhere to the following safety precautions:

(1) Gasoline, gas, charcoal, or other cooking devices or any unapproved open flame will not be permitted inside of or located within 20-feet of a tent. A separate tent or canopy over the cooking area may be acceptable with Fire Department approval.

(2) A 40BC fire extinguisher will be placed in the area where cooking is taking place.

(3) Precautions will be taken to keep the public away from open flames or cooking areas.

(4) All compressed gas cylinders will be secured against falling or being knocked over.

15 MAY 2001

(5) L/P tanks will be stored for use at least 5-feet from any burners.

(6) L/P tanks will be secured from falling and placed on a flat, level, firm surface.

(7) All L/P tanks and associated hardware, i.e., tubing, piping, and hoses will be rated in accordance with reference (u). All connections will be tested for leaks prior to lighting burner. Tanks must be equipped with a regulator if it holds over 20 lbs. of fuel.

(h) Where smoking is permitted, suitable ashtrays will be provided.

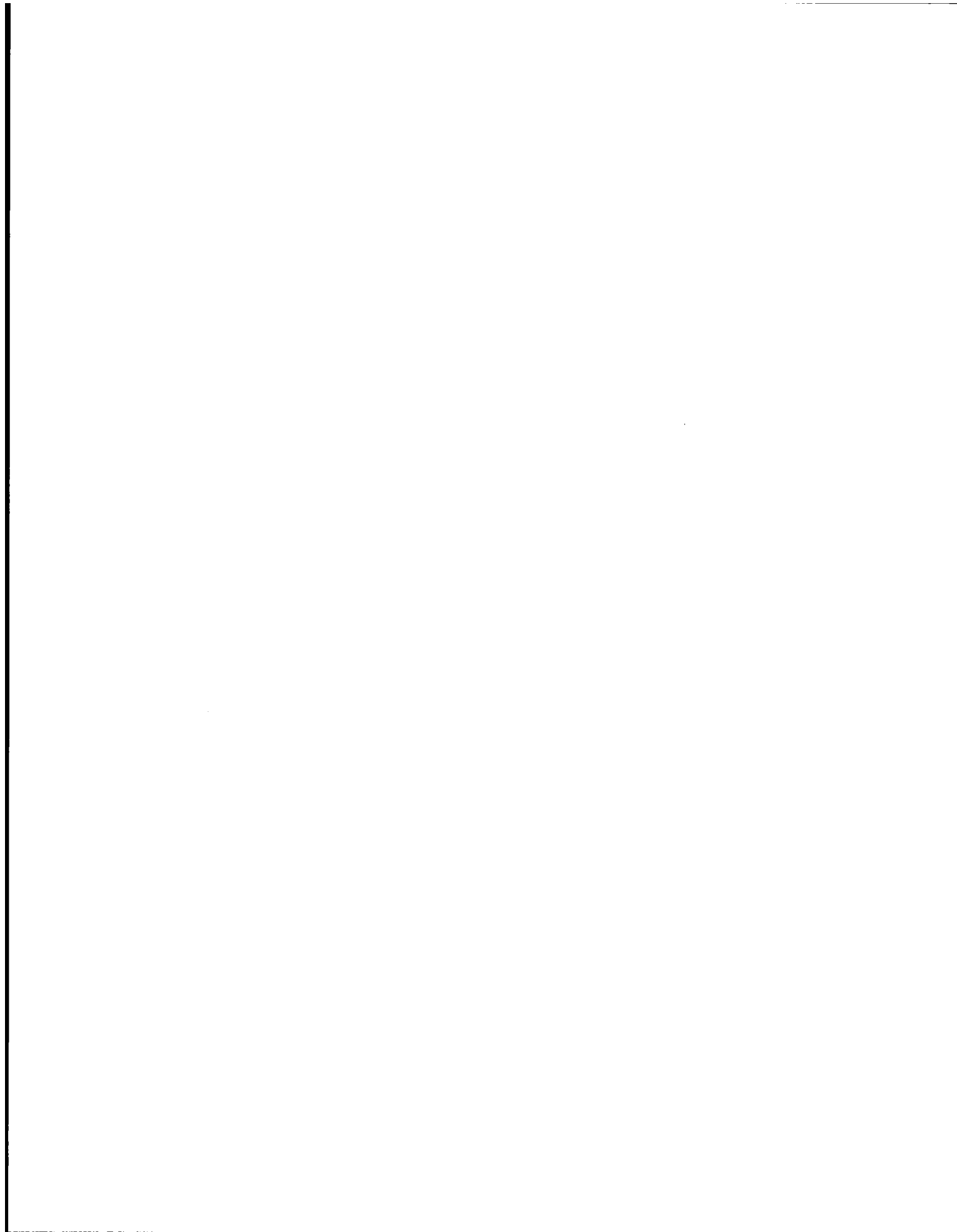
15 MAY 2001

NORTH STAIR
FLOOR

5

SUB-BASEMENT TO 24TH FLOOR
↓ NO FLOOR ACCESS
DOWN TO FIRST FLOOR
FOR EXIT DISCHARGE

APPENDIX 3-A



15 MAY 2001

CHAPTER 4MEANS OF EGRESS0401 GENERAL

Means of egress in new and existing buildings will be in accordance with reference (u).

0402 FUNDAMENTAL REQUIREMENTS

a. Every building or structure, new or old, designed for human occupancy will be provided with exits sufficient to permit prompt escape of occupants in case of fire or other emergency.

b. In every building or structure, exits will be so arranged and maintained as to provide free and unobstructed egress from all parts of the building or structure at all times when occupied.

c. No lock or fastening device will be installed to prevent free escape from the inside of any building.

EXCEPTION: Locks will be permitted in mental health, detention, or correctional facilities where supervisory personnel are continually on duty and effective provisions are made to remove occupants in case of fire or other emergency.

d. Exits will be accessible to the extent necessary to assure reasonable safety for occupants having impaired mobility.

e. Every exit will be clearly visible, or the route to reach every exit will be conspicuously indicated, in such a manner that every occupant of every building or structure will readily know the direction of escape from any point.

f. Each means of egress, in its entirety, will be so arranged or marked that the way to a place of safety is indicated in a clear manner.

g. Any doorway or passageway that is not an exit or a way to reach an exit, but is capable of being confused with an exit, will be so arranged or marked to prevent confusion with acceptable exits.

h. Two means of egress, as a minimum, will be provided in every building or structure, section, or area where their size, occupancy, and arrangement endanger occupants attempting to use a single means of egress that is blocked by fire or smoke.

i. The two means of egress will be arranged to minimize the possibility that both may be rendered impassable by the same fire or emergency condition.

15 MAY 2001

j. Every vertical way of exit, or other vertical opening between floors of a building, will be suitably enclosed or protected, as necessary. This will afford reasonable safety to occupants while using exits and to prevent spread of fire, smoke, or fumes through vertical openings from floor to floor before occupants have entered exits.

k. Where artificial illumination is required in a building or structure, exit facilities will be included in the lighting design in an adequate and reliable manner.

l. Stairwell usable space: There shall be no enclosed, usable space within an exit enclosure, including under stairs, nor shall any open space within the enclosure be used for any purpose that has the potential to interfere with egress. The use of exit enclosures for storage or for installation of equipment not necessary for safety is prohibited. Occupancy is prohibited other than for egress, refuge, and access. The intent is that the exit enclosure essentially be "sterile" with respect to fire safety hazards.

0403 EMERGENCY EXITS

a. No lock or other fastening device will be installed on, or in connection with, any emergency exit door (see exception, Section 402.C).

b. Emergency exit doors will not be blocked, tied, or propped open at any time.

c. Fire exit doors shall swing in the direction of exit travel when serving a high hazard area or an occupant load of more than 50.

d. Panic hardware, where required, will be maintained in proper working order at all times.

e. Self-closing devices, where required, will be maintained in proper working order at all times. When required to be self-closing the door will be self-latching upon closing.

0404 ILLUMINATION OF MEANS OF EGRESS

Where illumination of means of egress is required, it will be installed and maintained in accordance with reference (u).

0405 MARKING OF EXITS

Where the marking of an exit is required, such markings will be in accordance with reference (u).

15 MAY 2001

0406 FACTORS AFFECTING EGRESS

- a. Every required exit, exit access, or exit discharge will be continuously maintained free of all obstructions or impediments.
- b. No furnishings, decorations, or other objects will be so placed as to obstruct exits.
- c. Hangings or draperies will not be placed over exit doors or otherwise be located to conceal or obscure any part.
- d. Mirrors will not be placed on exit doors, or placed in or adjacent to any exit, exit access, or exit discharge.
- e. There will be no obstruction by railings, barriers, or gates that divide the open space into individual rooms, apartments or other uses.
- f. Where furniture or other movable objects obstruct the required path of travel, such obstructions may be required to be fastened out of the way using railings or other permanent barriers to protect the path of travel against encroachment.
- g. Clothing and other personal effects will not be stored in corridors or lobbies in such a way as to obstruct any part of an exit.
- h. Stairwell usable space: There shall be no enclosed, usable space within an exit enclosure, including under stairs, nor shall any open space within the enclosure be used for any purpose that has the potential to interfere with egress. The use of exit enclosures for storage or for installation of equipment not necessary for safety is prohibited. Occupancy is prohibited other than for egress, refuge, and access. The intent is that the exit enclosure essentially be "sterile" with respect to fire safety hazards.

0407 OVERCROWDING

- a. Premises are deemed to be overcrowded when the occupant load exceeds the exit capacity or the posted occupant load.
- b. No person will fail to leave any overcrowded premises when told to do so by the management of the premises or the Fire Department.

0408 EMERGENCY LIGHTING

- a. Emergency lighting, when required, will be installed, tested, and maintained in accordance with Chapter 1 of this directive and reference (u).

COMNAVREGMIDLANT/SOPA (ADMIN) HRINST 11320.11

15 MAY 2001

b. Emergency generators used to provide power to emergency lighting systems will be installed, tested, and maintained in accordance with reference (u).

15 MAY 2001

CHAPTER 5CONSTRUCTION, RENOVATION, PLANS REVIEW0501 INTRODUCTION

The proper planning, design, and review of new construction projects and alterations to facilities to incorporate adequate fire protection features is essential in order to maintain an effective fire protection program, to reduce property loss, and to provide maximum safety for building occupants. The Atlantic Division Fire Protection Engineering Command is assigned responsibility to plan, inspect, test, and recommend for approval all fire protection system installations before final acceptance by the Navy.

0502 CRITERIA

Fire protection criteria for all new construction and alterations to facilities will be in accordance with references (d) and (u).

0503 FIRE PROTECTION ENGINEERING REVIEW REQUIREMENTS

a. Activities will have all plans reviewed by a qualified Fire Protection Engineer from the Atlantic Division Naval Facilities Engineering Command or Public Works Center for:

(1) All new construction projects.

(2) All major renovations to facilities.

(3) Installation of, changes to, or modifications of installed fire alarm, detection and suppression systems, to include a provision for acceptance tests of systems upon completion of installation.

(4) Changes or modifications to water distribution systems.

b. The Storefront Fire Prevention Office, prior to the start of such projects, will review minor alterations or modifications to facilities and self-help projects.

0504 OFFICER AND RESIDENT OFFICER IN CHARGE OF CONSTRUCTION RESPONSIBILITIES

a. The Officer in Charge of Construction will provide liaison with the Storefront Fire Prevention Office and contractors working on base to ensure proper fire prevention and protection requirements are followed within the scope of the contractor's responsibility to the government.

b. The Resident Officer in Charge of Construction (ROICC) will notify the Storefront Fire Prevention Office of all new construction

15 MAY 2001

projects and dates of pre-construction conferences. A Fire Prevention representative will attend all pre-construction meetings.

c. The Fire Prevention representative will provide the contractor with information containing fire prevention instructions and fire safety precautions. This information will be maintained at the construction site.

0505 PUBLIC WORKS OFFICER CONSTRUCTION RESPONSIBILITIES

a. The Public Works Officer will provide liaison with the Storefront Fire Prevention Office and contractors, or Public Works Maintenance personnel working on base with Public Works Construction Projects. This liaison is to ensure proper fire prevention and protection requirements are followed within the project scope for the contractor's or Public Works Maintenance personnel responsibility to the government.

b. The Public Works Officer will notify the Storefront Fire Prevention Office of all new construction projects and dates of pre-construction conferences. A Fire Prevention representative will attend all pre-construction meetings.

c. The Fire Prevention representative will provide the contractor or Public Works maintenance personnel with information containing fire prevention instructions and fire safety precautions. This information will be maintained at the construction site.

0506 CONSTRUCTION BATTALION UNIT (CBU) OFFICER CONSTRUCTION RESPONSIBILITIES

a. The CBU Officer will provide liaison with the Storefront Fire Prevention Office and CBU personnel working on base with CBU projects to ensure proper fire prevention and protection requirements are followed within the project scope for responsibilities to the government.

b. The CBU Officer will notify the Storefront Fire Prevention Office of all new construction, or renovation projects, and dates of pre-construction conferences. A Fire Prevention representative will attend all pre-construction meetings.

c. The Fire Prevention representative will provide CBU personnel with information containing fire prevention instructions and fire safety precautions. This information will be maintained at the construction site.

0507 CONTRACTOR RESPONSIBILITIES

a. Past experience emphasizes the necessity for coordination and cooperation between construction personnel and operating forces. On a

15 MAY 2001

lump sum contract, contractors have, by the terms of the contract, primary responsibility for the protection of their work. The contractor is responsible for all damage to persons, or to other property that occurs as a result of negligence in connection with the prosecution of the work. Contractors have absolute responsibility with regard to their own work, and must exercise reasonable care in the protection of other base property.

b. In addition, the contractor will be required to comply with reasonable base orders concerning fire prevention and safety.

0508 CONSTRUCTION/ALTERATION/RENOVATION

a. Construction projects pose many fire prevention and protection problems. During construction operations, many transient fire hazards are present. Fires that are not extinguished in the incipient stage are likely to spread more rapidly than they would in finished structures. In order to minimize the potential for fire, it is essential that proper fire prevention and safety practices be followed.

b. Of primary importance are the provisions made for the early detection of fire and prompt notification of fire to Storefront ECC/Fire Dispatch (see Chapter 1, paragraph 0112 for telephone numbers). Added precautions are required for the protection of projects that are remote from the Storefront location. In such cases, it may be necessary to resort to temporary or emergency measures in order to provide for fire protection. This dictates the necessity for indoctrination of all supervisory personnel in the fundamentals of fire protection and prevention measures necessary to create a safe environment during construction projects.

0509 CONSTRUCTION/ALTERATION/RENOVATION SAFEGUARDS

a. When new buildings are erected and the fire main system must be extended to provide adequate protection, it is highly desirable that the fire main extension, together with hydrant installation, be provided prior to the actual construction of the building. In the event that such a procedure is not possible, a temporary extension of the fire main system will be made in order to provide a water supply adequate for firefighting operations per reference (q).

b. During construction operations, temporary ladders and catwalks will be installed in such a manner as to afford safe and rapid access for firefighters, as well as an exit for workers. As the work progresses, completion of permanent stairway enclosures and other structural features that help to prevent the horizontal and/or vertical spread of fire is of great importance.

c. If an automatic sprinkler system is to be permanently installed, the water supply for the system will be ready and the

15 MAY 2001

sprinkler heads promptly installed after completion of the interior finish. Blank flanges, used to permit sprinkler protection by sections as construction progresses, will have gaskets conspicuously marked to assure removal as the sprinkler system is extended.

d. During alteration or renovation projects, where the building is protected by fire protection systems, such systems will be maintained operational at all times during alteration/renovation if feasible.

EXCEPTION: Where alteration/renovation requires modification of a portion of the fire protection system, the remainder of the system will be kept in service and the Fire Department will be notified. When necessary to shut down the system, the Fire Department will have the authority to require alternate measures of protection until the system is returned to service. The Fire Department will be notified when the system is shut down and when returned to service.

e. Notification of fire protection system shut down or return to service will be made to the site specific ECC/Fire Dispatch. This notification will be made, if possible, BEFORE systems are shut down or returned to service. Shutting down or returning to service any fire protection system will be the responsibility of a qualified Public Works mechanic, activity mechanic, or a qualified contractor.

f. Fire lanes will be provided at the start of a construction project and be maintained throughout construction for access.

EXCEPTION: Fire lane markings are not required until completion of the building project.

0510 CONSTRUCTION/ALTERATION/RENOVATION FIRE PREVENTION MEASURES

a. To ensure adequate fire prevention measures are taken at construction sites they will be inspected by Storefront Fire Prevention inspectors.

b. Working spaces and repair areas will be policed regularly to maintain order and cleanliness to reduce fire hazards.

c. Proper clearance from buildings or structures will be maintained, taking care to ensure that piles of lumber and other materials to be used in construction do not interfere with the right of way.

d. Designated areas will be established for the dumping of refuse materials.

e. Paint rags and other materials subject to spontaneous ignition require proper disposal.

15 MAY 2001

f. Small quantities (i.e., 5-gallon individual units) of flammable or combustible liquids will be carried/stored in either the manufacturers container or in an approved marked safety container.

g. Bulk quantities of flammable or combustible liquids will be stored in approved storage containers. Facilities for the containment of any leakage or spillage of contents will be provided in accordance with reference (u).

h. Liquid fuel powered equipment such as air compressors, hoists, and pumps will be located so that exhausts are directed away from combustible materials. Liquid fueled engines will be shut off during refueling operations to prevent ignition of gasoline vapors or liquid from possible spills or overflow.

i. Combustible litter such as scrap lumber, paper, cement sacks, and other building debris will be removed daily and properly disposed of. Bonfires or burning of rubbish is strictly prohibited.

j. Welding and cutting equipment, rivet forges, and other spark-producing equipment will be properly used and protected. A Hot Work permit is required in accordance with Chapter 8 of this directive.

k. Temporary wiring for construction operations will be carefully installed and supervised by a competent electrician.

l. Temporary electrical wiring will be protected from cranes, shovels, trucks, traffic, and other construction equipment.

m. Permanent wiring systems will replace temporary systems as soon as removal of form-work will permit.

n. Temporary heating devices will be properly used and situated so that they are not likely to overturn or come in contact with combustibles. Temporary heating devices will be either U.L. listed or F.M. approved.

o. Liquid fuel heaters are commonly used for temporary heating, however, combustible material such as canvas weather protection, is frequently ignited by liquid fuel fire heaters that are improperly installed or supervised. Safe arrangements, however, are possible and the provisions for permanent heating plants or a temporary heating system can often be substituted for the more hazardous liquid fuel heaters. When liquid fuel heaters are used indoors carbon monoxide levels will be within Occupational Safety and Health Administration (OSHA) and industrial hygiene levels.

p. A standing fire watch will be maintained if the fire evacuation alarm system is required to be disconnected during alteration or renovation projects.

15 MAY 2001

q. At least one approved fire extinguisher will be provided in plain sight on each floor at each usable stairway and/or exit.

r. Suitable fire extinguishers will be provided on manned equipment utilizing liquid fuel.

0511 SELF-HELP PROJECTS

a. Construction, alterations, and renovations performed as a self-help project will be in accordance with this instruction and Storefront Installation self-help regulations.

b. Approval will be obtained from the Storefront Fire Prevention Office prior to the start of any self-help project. This approval will be in the form of a permit/request for authorization and issued by the Fire Prevention Office or Self-Help Office, subject to project plans review and completed materials list.

c. The command/activity will be responsible for contacting the Storefront Fire Prevention Office to schedule a plans review.

0512 NEW FACILITY OCCUPANCY

Personnel will not occupy newly constructed facilities until all fire protection features are incorporated and completed, including the installation and testing of all fire protection alarm, detection and suppression systems.

0513 DEMOLITION SAFEGUARDS

Fire prevention requirements for buildings undergoing demolition operations will be in accordance with this instruction.

15 MAY 2001

CHAPTER 6FIRE PROTECTION SYSTEMS/EQUIPMENT0601 PORTABLE FIRE EXTINGUISHERS

a. Policy

(1) The installation, maintenance, and testing of portable fire extinguishers will be performed in accordance with reference (u).

(2) The primary extinguishing agent will be a multi-purpose dry chemical, rated to extinguish Class A, B, and C fires.

EXCEPTION: The extinguishing agent for hangar bays used for the storage of operational aircraft and large computer data centers will be determined by the Fire Department as previously established at each storefront activity.

b. General

(1) Activation or tampering with any portable fire extinguisher for any reason other than a fire is strictly prohibited. Personnel found to have activated or tampered with any portable fire extinguisher are subject to appropriate disciplinary action. Each activity occupying a building will be financially responsible for the repair or replacement of portable fire extinguishers damaged or missing as a result of vandalism.

(2) Any person finding indications that a fire extinguisher has been used and/or is not fully operational will report that fact immediately to the building fire warden or Storefront Fire Prevention Office.

(3) Fire suppression equipment will not be used or removed from its assigned location for any reason, except for firefighting, fire drills, repairs or maintenance.

(4) Fire extinguishers will not be blocked or otherwise obscured from view.

c. Responsibilities

(1) General

(a) The maintenance required, including recharging and repairing of all assigned portable fire extinguishers, shall be conducted as previously performed at each storefront activity.

(b) Reimbursing for repairing and recharging of portable fire extinguishers discharged or damaged due to intentional tampering,

15 MAY 2001

or for purposes other than fire, will be conducted as previously performed at each storefront activity.

(c) Replacement of portable fire extinguishers due to theft or loss will be conducted as previously performed at each storefront activity.

(2) The Fire Department is responsible for:

(a) Determining the type, location, and number of portable fire extinguishers required.

(b) Inspecting all portable fire extinguishers during scheduled fire prevention inspections.

(3) Occupants of Navy Family Housing are responsible for furnishing and maintaining portable fire extinguishers in their own residential unit.

(4) Activity Commanders/Subordinate Commanders/Tenant Commanders/Officers in Charge are responsible for:

(a) Installation of portable fire extinguishers as determined by the Fire Department.

(b) Conducting a visual inspection of all portable fire extinguishers to ensure the seal and pin are intact, pressure indicator (the gauge) is operational, and no physical damage is apparent. This inspection shall be performed on a monthly basis. Sign and date the fire extinguisher inspection tag after completion of the visual inspection.

(c) Reporting portable fire extinguisher deficiencies to the Fire Prevention Office immediately (see Chapter 1 paragraph 0112 for telephone numbers).

(d) Furnishing and providing maintenance for any additional fire extinguishers desired above the amount required by the Fire Department, or when a type of fire extinguisher is requested that is not used by the Fire Department. Maintenance includes inspection, recharging, and repairs.

(e) Procurement of portable fire extinguishers for new facilities. The Fire Department or appropriate Fire Protection Engineers will determine the required number and type of fire extinguishers.

0602

FIXED FIRE EXTINGUISHING, DETECTION, AND ALARM SYSTEMS

a. The installation, maintenance, testing, and inspection of all fire extinguishing systems (CO2, foam, sprinklers, etc.) and fire

15 MAY 2001

alarm systems will be accomplished in accordance with references (d), (k), and (u).

b. Plans, review, and acceptance tests for newly installed fixed fire extinguishing and fire alarm systems will be in accordance with Chapter 5 of this directive.

c. The Storefront Fire Prevention Office will be notified at least 48 hours prior to the start of any system acceptance test (see Chapter 1, paragraph 0112 for telephone numbers). A Fire Prevention representative will be present for all system acceptance tests. Upon completion of the final acceptance test, a copy of the Certificate of Compliance will be forwarded to the Fire Prevention Office.

d. Fire extinguishing, detection, and alarm systems will not be placed out of service except for repairs or maintenance. Prior to placing systems out of service and when returning systems back to service, commands will notify the Storefront ECC/Fire Dispatch who will in turn notify the Fire Prevention Office during normal working hours. After hours and weekends the ECC/Fire Dispatch will notify the on-duty Storefront Manager. Restoration of the systems will be given highest priority for repairs. Building occupants will implement contingency plans as appropriate until service is restored.

e. Activities are responsible for having all fire extinguishing, detection, and alarm systems tested, inspected, maintained, and/or repaired in accordance with references (k) and (u). This will either be performed by a qualified Public Works Center (PWC), Norfolk mechanic, activity mechanic, or on contract basis through a company certified to perform these services. Copies of test and inspection reports will be forwarded to the Fire Prevention Office.

f. To maintain integrity of the fire alarm system, fire alarm systems will not be used to monitor or transmit alarms for purposes other than fire extinguishing, fire detection, and fire drills.

g. Activities will maintain a location map of all under-floor/above-ceiling detectors, or have a smoke-detector annunciator in the affected area. A map or annunciator showing the locations of each of the under-floor/above-ceiling detectors will be maintained in each affected area.

h. Activation of any fire extinguishing, detection, or alarm system for any purpose other than for fire is strictly prohibited.

i. When a fire extinguishing, detection, or alarm system is to be tested or repaired and the accidental activation of the system is possible, the activity will notify PWC Norfolk maintenance or contracts to service the alarm system to prevent accidental alarm transmission to the Fire Department. Adequate notification will be made to PWC to allow time to secure the system.

15 MAY 2001

(1) SPRINKLER SYSTEMS

(a) Sprinkler control valves will be kept in the open position. If sprinkler heads become fused due to fire, the control valves will not be closed until directed by the Fire Department.

(b) Qualified PWC Norfolk mechanics, activity mechanics, or qualified contractors are responsible for testing and maintaining sprinkler systems, including replacement of sprinkler heads and restoration to service after activation.

(c) Sprinkler systems will have an appropriate inspection tag attached, indicating last inspection/test date and system status, in/out of service.

(d) Hanging any object from sprinkler piping is prohibited.

(e) In storing any low hazard materials, a clearance of at least 18 inches between the material and the sprinkler heads will be maintained. A clearance of at least 36 inches will be maintained between sprinkler heads and any stored high hazard materials.

(f) Dropped ceilings or any other obstruction that would impede the operation of the system will not obstruct sprinkler heads. Painting of sprinkler heads is prohibited.

(g) Sprinkler and standpipe connections and control valves will be painted red.

(h) Fire Department sprinkler, standpipe connections, and control valves will not be obscured. Clearances for the connections are specified in Chapter 3 of this directive.

(2) FIRE ALARM SYSTEMS, MASTER FIRE ALARM BOXES AND CIRCUITS

(a) Storefront PWC Norfolk maintenance or contracts are responsible for maintenance and repair of all fire alarm systems, master fire alarm boxes, and circuits.

(b) PWC Norfolk maintenance or the PWC Norfolk contractor will notify the Storefront ECC/Fire Dispatch (see Chapter 1, paragraph 0112 for telephone numbers) when any fire alarm system, master fire alarm boxes, or circuits are placed out of service for repairs or maintenance and when returned to service.

(c) Storefront ECC/Fire Dispatch are responsible for notifying the Fire Department and all commands affected by fire alarm system, master fire alarm boxes, or circuit outages, and when they are

15 MAY 2001

returned to service. ECC/Fire Dispatch will notify the Fire Prevention Office during normal working hours and the on-duty Battalion Chief on nights, weekends, and holidays. Storefront ECC/Fire Dispatch are responsible for maintaining records of all such outages and notifications to be made.

(d) Fire alarm systems will have an appropriate inspection tag attached, indicating last inspection/test date and system status, in/out of service, and name of person performing inspection/test.

(e) Street fire alarm boxes will be painted red.

(f) All fire alarm box numbers within Navy Regional Fire Rescue Hampton Roads will be assigned by the Storefront Fire Department. Requests for fire alarm box number assignments will be made in writing to the Fire District Storefront Manager.

(g) PWC Norfolk will coordinate with the Storefront Fire Prevention Office on the installation of coded wheels into fire alarm boxes.

(3) STANDPIPE SYSTEMS: Each command/activity shall ensure that standpipe systems are properly inspected, tested, and maintained. This will be performed by either a qualified PWC mechanic, activity mechanic, or on contract basis through a company certified to perform these services.

(4) FIRE PUMPS

(a) Each command/activity will ensure fire pumps are properly inspected, tested, and maintained. This will be performed by either a qualified PWC Norfolk mechanic, activity mechanic, or on contract basis through a company certified to perform these services.

(b) Fire pumps will have an appropriate inspection tag attached indicating last inspection/test date, pump status (in/out of service), and the name of the person performing the inspection/test.

0603 FIRE HYDRANT INSPECTIONS, FLUSHING, AND MAINTENANCE

a. Storefront PWC Norfolk maintenance or contracts are responsible for maintenance and repairs to all fire hydrants and sectional control valves in accordance with references (d) and (u).

b. Storefront PWC Norfolk maintenance, PWC Norfolk contracts, or the Fire Department is responsible for inspecting and flushing all fire hydrants annually.

c. PWC Norfolk maintenance or PWC Norfolk contracts is responsible for notifying Storefront ECC/Fire Dispatch (see Chapter 1, paragraph 0112 for telephone numbers) when fire hydrants are placed out of

15 MAY 2001

service for repairs or maintenance and when they are returned back into service. ECC/Fire Dispatch will notify the Fire Department of all outages and repairs.

d. "OUT OF SERVICE" signs will be placed on all fire hydrants that are inoperable in accordance with as previously performed at each Storefront activity.

e. Blue reflective highway markers will be installed in the centerline of roadways and adjacent to all fire hydrants to assist in locating fire hydrants.

f. No vehicles are permitted to be parked within 15-feet of any fire hydrant. Fire hydrants will be kept free of all obstructions.

g. Use of fire hydrants for any purpose other than firefighting can only be authorized by PWC Norfolk. Storefront PWC's will notify ECC/Fire Dispatch (see Chapter 1 paragraph 0112 for telephone numbers) and will give locations of affected fire hydrants and duration of use. ECC/Fire Dispatch will relay this information to the Fire Department.

0604

FIRE HYDRANT CLASSIFICATION AND MARKINGS

a. Classification of Fire Hydrants: Fire hydrants are classified in accordance with their rated capacities (at 20 psi), residual pressure, or other designated value as follows, in accordance with reference (u):

Class AA - Rated capacity of 1,500 gpm or greater

Class A - Rated capacity of 1,000-1,499 gpm

Class B - Rated capacity of 500-999 gpm

Class C - Rated capacity of less than 500 gpm

b. Marking of Fire Hydrants

(1) Fire hydrant bonnets will be painted with the following capacity-indicating color scheme:

Class AA - Light Blue

Class A - Green

Class B - Orange

Class C - Red

High Pressure - Black

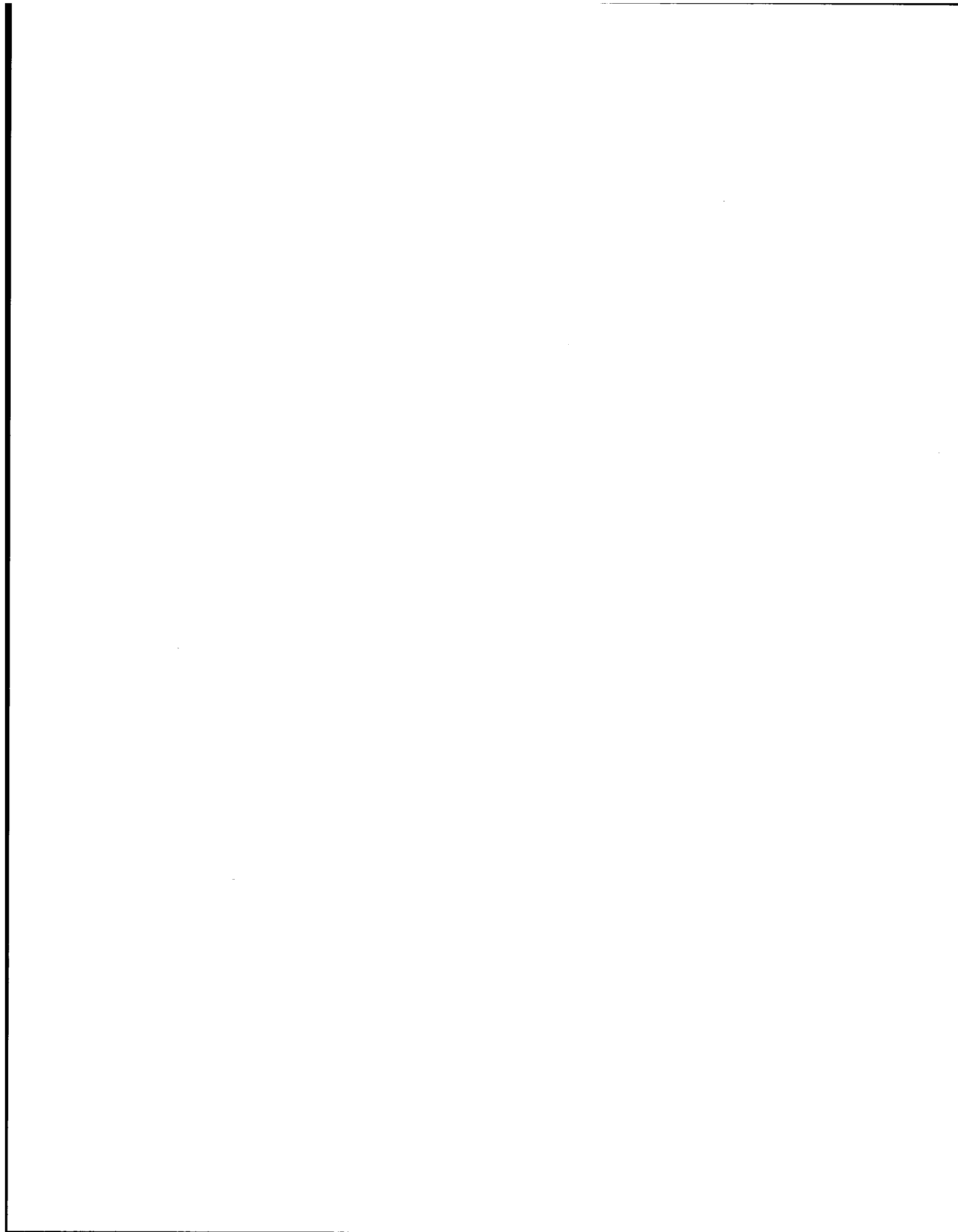
15 MAY 2001

For rapid identification at night, capacity colors should be of a reflective type paint.

(2) Fire hydrant barrels may be painted any color as prescribed by the activity. However, barrels should be painted brilliant yellow in accordance with NAVFAC P-309, Navy Color Manual.

(3) Fire hydrants rated at less than 20 psi will have the rated pressure stenciled in black on the hydrant top.

(4) Each fire hydrant is required to be numbered for identification purposes. The number and feed size should be either stamped on a plate attached to the fire hydrant barrel, or stenciled on the fire hydrant barrel. Such hydrant markings will be clearly visible at all times.



15 MAY 2001

CHAPTER 7FACILITIES0701 CLASSIFICATION OF OCCUPANCY

All buildings or structures will be classified by occupancy types in accordance with references (d) and (u).

a. Group A occupancies (Assembly): Assembly occupancies include, but are not limited to:

Assembly Halls	Drinking establishments
Adult education, classrooms, 50 persons and over	Exhibition Halls
Auditoriums	Gymnasiums
Bowling Centers	Libraries
Conference Rooms	Museums
Churches	Passenger Terminals
Dance Halls	Restaurants
	Theaters

b. Group E occupancies (Educational): Educational occupancies include buildings used for educational (excluding adult education) purposes for four or more hours a day or more than twelve hours per week. Educational occupancies include:

Day-care Facilities	Nursery Schools
Kindergartens	Schools (non-adult)

c. Group I occupancies (Health Care, Detention, and Correctional): Health Care, Detention, and Correctional occupancies include:

Ambulatory Care Centers	Hospitals
Correctional Institutions	Medical & Dental
Detention	Substance Abuse Centers
Limited Care Facilities	

d. Group R occupancies (Residential): Residential occupancies include, but are not limited to:

Apartments	One & Two Family Dwellings
Dormitories	

e. Group B occupancies (Mercantile & Business): Mercantile and Business occupancies include:

Adult education, classrooms under 50 persons	Laboratories for Basic or Applied Research. Not including Hazardous Chemicals
Air Traffic Control Towers	Malls
Ambulatory Outpatient	

15 MAY 2001

Clinics
Department Stores
General Offices

Shopping Centers
Supermarkets

f. Group H occupancies: (Industrial & Storage) Industrial and Storage occupancies include:

Barns
Bulk Oil/Fuel Storage
Cold Storage
Dry Cleaning Plants
Freight Terminals
Hangars
Hazardous Chemicals
Laboratories involving
Hazardous Chemicals

Laundries
Power Plants
Pumping Stations
Telephone Exchanges
Truck and Marine Terminals
Warehouses

g. Group M occupancies (Special Structures): Special structures include occupancies from the preceding groups that are in special structures or buildings including the following:

Open Structures
Sheds
Towers
Underground Structures
Vehicle Parking

Vehicles
Vessels
Water Surrounded Structures
Windowless Buildings

0702 GENERAL

a. Fire and life safety requirements for all occupancy classifications will be in accordance with references (d) and (u).

b. Additions will conform to the provisions for new construction.

c. MODERNIZATION OR RENOVATION. Any alteration or installation of new equipment will be accomplished as nearly as practical in conformance with the requirements for new construction. Alterations will not diminish the level of life safety below that which exists prior to the alteration. In no case will the resulting life safety be less than that required for existing buildings.

d. MIXED OCCUPANCIES. Where two or more classes of occupancy occur in the same building or structure, and are intermingled so that separate safeguards are impracticable, means of egress facilities, construction, protection, and other safeguards will comply with the most restrictive life safety requirements of the occupancies involved.

e. CHANGES OF OCCUPANCY. In any building or structure, whether necessitating a physical alteration or not. A change from one occupancy classification to another, or from one occupancy sub-classification to another sub-classification of the same occupancy,

15 MAY 2001

will be permitted only if such building or structure conforms with the requirements of this instruction applying to new construction for the proposed new use.

f. Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with this instruction, such device, equipment, system, condition, arrangement, level of protection, or other feature will thereafter be permanently maintained unless this instruction exempts such maintenance.

g. Nothing in this instruction will be construed to prohibit a better type of building construction, additional exits, or otherwise safer conditions than are specified by the minimum requirements of this instruction.

0703 ASSEMBLY OCCUPANCIES

a. All assembly occupancy will be sub-classified according to its occupant load as follows:

Class A - occupant load greater than 1,000 persons.

Class B - occupant load greater than 300 but not greater than 1,000 persons.

Class C - occupant load of 50 or more but not greater than 300 persons.

b. The occupant load permitted in any assembly building, structure, or portion thereof will be determined on the basis of the occupant load factors in accordance with reference (u). Fire Protection Inspectors will calculate occupant load and issue a Maximum Occupancy Permit.

c. The employees or attendants of places of public assembly will be trained and drilled in the duties they are to perform in case of fire, panic, or other emergency; including the proper use of portable fire extinguishers and other manual fire suppression equipment if provided.

d. In theaters, motion picture theaters, auditoriums, and other similar Class A and B assembly occupancies where there are non-continuous programs, an audible announcement will be made prior to the start of each program. This announcement will notify occupants of the location of the exits to be used in case of a fire or other emergency.

e. OPERATING FEATURES

(1) Managers of public assembly occupancies will establish and maintain a written employee certification system to ensure that all employees have been trained and understand their fire prevention

15 MAY 2001

responsibilities within their work areas. Training and certification will include, as a minimum:

- (a) Quarterly fire drills (no building evacuation required).
- (b) Fire prevention indoctrination of newly hired employees.
- (c) Procedures for pre-opening operations and daily closing inspections.
- (d) Maximum occupant capacity information.
- (e) Kitchen fire suppression equipment training.
- (f) Portable fire extinguisher training.
- (g) Actions to be taken in the event of a fire, including Fire Department notification procedures.

(2) Managers, or their assistants, will have the responsibility of ensuring daily pre-opening, during operations, and certified personnel conduct closing inspections. A completed list of these inspections will be submitted to the Fire Prevention Office for filing and documentation.

(3) Daily pre-opening and during operation inspections will be performed to ensure the following (as a minimum):

- (a) All exit doors are unlocked and unobstructed.
- (b) All fire extinguishers are in place and operational.
- (c) Fire alarm system and all pull boxes are unobstructed and operational.
- (d) All fire lanes are clear.
- (e) Exit and emergency lights are operational.
- (f) The maximum occupancy load is not exceeded.
- (g) A Fire Department Fire official shall perform spot checks of club facilities during peak hours of occupant load and initial the custodian's daily checklist.

(4) Daily closing inspection will be performed to ensure the following (as a minimum):

15 MAY 2001

(a) All trash is collected and removed from the building and properly disposed of.

(b) All smoking materials are extinguished and have been properly discarded in a noncombustible container.

(c) Fire alarm system is operational.

(d) All heat producing equipment and other appliances are secured.

(5) CROWD MANAGERS. In Class A assembly occupancies, there will be trained Crowd Managers or Crowd Manager Supervisors at a ratio of 1 Crowd Manager/Supervisor for every 250 occupants.

EXCEPTION 1: Assembly occupancies used exclusively for religious worship with an occupant load not greater than 2,000.

EXCEPTION 2: Where in the opinion of the Fire Department the existence of an approved supervised sprinkler system and the nature of the event warrant the reduction in ratio of trained crowd managers to occupants may be reduced.

f. OPEN FLAME DEVICES: Open flame devices will not be used in any assembly occupancy except as authorized by the Fire Department and in accordance with reference (u).

EXCEPTION: Candles may be permitted on tables provided they are securely supported on substantial non-combustible bases and the candle flame is protected.

g. SPECIAL FOOD SERVICE DEVICES: Portable cooking equipment that is not flue connected will be permitted in accordance with reference (u).

h. FURNISHINGS, DECORATIONS, AND STAGE SCENERY

(1) Draperies, curtains, and other similar furnishings and decorations will be flame resistant.

(2) Furnishings or decorations of a highly combustible character will not be used.

(3) The Fire Department will impose controls on the amount and arrangement of combustible content in assembly occupancies to provide an adequate level of safety to life from fire.

i. SEATING: Seats in assembly occupancies will be installed and arranged in accordance with reference (u).

15 MAY 2001

0704 EDUCATIONAL OCCUPANCIES

a. DAY CARE CENTERS

(1) Fire Prevention inspections will be conducted monthly by a Fire Prevention Inspector.

(2) Fire exit drills will be held monthly and will be conducted by Fire Prevention personnel.

(3) In the conduct of drills, emphasis will be placed upon orderly evacuation under proper discipline rather than upon speed.

(4) Draperies, curtains, and other similar furnishings and decorations will be flame resistant.

(5) Child-prepared artwork and teaching materials will be permitted to be attached directly to the walls and will not exceed 20 percent of the wall area.

b. Child Development Home

(1) Fire protection, prevention, and life safety requirements for Child Development Home will be in accordance with reference (f).

(2) In accordance with reference (f), Child Development Home Providers will have their home inspected by the Fire Department before child care certification is granted.

0705 HEALTH CARE, DETENTION, AND CORRECTIONAL OCCUPANCIES

a. All health care facilities will be so designed, constructed, maintained, and operated as to minimize the possibility of a fire emergency requiring the evacuation of occupants. Because the safety of health care occupants cannot be assured adequately by dependence on evacuation of the building, their protection from fire will be provided by appropriate arrangement of facilities, adequate staffing, and careful development of operating and maintenance procedures composed of the following:

(1) Proper design, construction, and compartmentation.

(2) Provision for detection, alarm, and extinguishment.

(3) Fire prevention and the planning, training, and drilling in programs for the isolation of fire, transfer of occupants to areas of refuge or evacuation of the building.

b. The administration of every detention or correctional facility will have in effect, and provide to all supervisory personnel, written copies of a plan for the protection of all persons in the event of

15 MAY 2001

fire and for their evacuation to areas of refuge, and for evacuation from the building when necessary. All employees will be instructed and drilled with respect to their duties under the plan. The plan will be coordinated with and reviewed by the Fire Department.

c. Employees will be instructed in the proper use of portable fire extinguishers and other manual fire suppression equipment that they may be called upon to use.

d. Fire exit drills will be conducted in accordance with reference (u).

0706 RESIDENTIAL OCCUPANCIES

a. HOTELS AND DORMITORIES (BARRACKS)

(1) No door in any means of egress will be locked against egress when the building is occupied.

(2) All employees of hotels will be instructed and drilled in the duties they are to perform in the event of fire, panic, or other emergency.

(3) A floor diagram reflecting the actual floor arrangement, exit locations, and room identification will be posted in a location and manner acceptable to the Fire Department on, or immediately adjacent to, every guest/resident room door.

(4) Fire safety information will be provided to allow guests/residents to make a decision to either evacuate to the outside, evacuate to an area of refuge, or remain in place.

b. APARTMENTS, ONE AND TWO FAMILY DWELLINGS

(1) In any dwelling or living unit of two rooms or more, every sleeping room and every living area will have at least one primary means of escape and one secondary means of escape.

(2) Fuel fired portable space heating devices are strictly prohibited.

(3) Electrical portable space heating devices are prohibited.

EXCEPTION: In cases of extreme emergency conditions, electrical portable space heating devices may be authorized for use, but only when distributed by installation command self-help.

(4) The use of extension cords will be kept to a minimum.

(5) Smoke detectors/alarms shall be provided and installed in accordance with reference (u).

15 MAY 2001

(6) A minimum of one smoke detector will be provided adjacent to sleeping areas in accordance with reference (u).

(7) During change of occupancy, smoke detectors will be thoroughly cleaned and tested. Cleaning will include removal of the smoke detector cover and vacuum to dislodge dust, lint, and insect debris.

(8) Carbon monoxide detectors (CO) shall be provided and installed in accordance with reference (u).

0707 MERCANTILE AND BUSINESS OCCUPANCIES

a. Mercantile occupancies will be sub-classified as set forth in reference (u).

b. Employees of mercantile occupancies will be instructed in the proper use of portable fire extinguishers.

15 MAY 2001

CHAPTER 8HAZARDOUS PROCESSES0801 HOT WORK

a. DEFINITION: Hot work is defined as any work involving general heating by any means at or above 400°F. This includes welding, flame cutting, use of open flame equipment, and tar kettle operations. In addition, grinding, abrasive blasting, drilling, or any cold work involving the probability of striking sparks will be considered Hot Work.

0802 GENERAL

a. All Hot Work operations will be inspected by the Storefront Fire Prevention Office prior to the start of Hot Work operations (see exceptions, paragraph 803). A written permit will be issued. Hot Work permits may be obtained by calling the ECC/Fire Dispatch (see Chapter 1, paragraph 0112 for telephone numbers).

b. All individuals performing Hot Work operations will be fully qualified and trained in the safe use and operation of all equipment, and aware of fire safety requirements.

c. Hot work permits will be valid for a period not to exceed 12 hours.

EXCEPTION: Varying circumstances require a Hot Work operation to extend beyond 12 hours. At the discretion of the Fire Department, a Hot Work permit may be issued for a period exceeding 12 hours. But, in no case will a Hot Work permit be valid in excess of 24 hours.

d. If Hot Work operations are to extend beyond 24 hours, issuance of a new permit will be required.

e. If conditions under which the Hot Work permit was issued changes, the permit will be considered invalid.

0803 OPERATIONS REQUIRING PERMIT

A Hot Work permit will be required for the following:

a. On all piers, or on ships or other areas where molten slag or sparks may fall on piers, or in adjacent water near the piers.

b. Adjacent to, or in proximity of flammable or combustible liquid storage areas, containers or equipment, pipelines or fuel dispensing equipment, or other operations involving flammable or combustible liquids.

15 MAY 2001

c. In areas that present the possibility of hampered exit of personnel performing Hot Work, or any other operation which presents unusual, special, or questionable circumstances.

d. Aircraft or aircraft engines, aircraft ground support equipment, or fuel/oil tanks. In addition, Hot Work performed aboard aircraft will require an Aircraft Welding Fire Safety Checklist be issued.

e. To all PWC Norfolk, contractor, or military personnel, except as indicated in paragraph 805 of this directive.

f. For all other Hot Work operations except as indicated in paragraph 805 of this directive.

0804 OPERATIONS WITHIN CONFINED SPACES

a. In a non-emergency status, the command OSHA has the responsibility to recognize and identify confined spaces.

b. Once a space has been determined to be a confined space, and upon receipt of a gas free certification, the Fire Department will issue a Hot Work permit in accordance with this instruction.

0805 EXCEPTIONS TO ISSUANCE OF HOT WORK PERMIT BY THE FIRE DEPARTMENT

Hot Work permits will not be required to be issued by the Fire Department and may be self-issued in areas that are specifically designed or designated for burning and welding operations and are approved in writing by the Storefront Fire Department. This approval shall be in the form of a Hazardous Operation/Process Storefront Authorization Permit.

0806 HOT WORK SAFEGUARDS

The following safety precautions will be observed for ALL Hot Work operations:

a. Equipment will be handled, operated, and maintained at a level which precludes the possibility of a fire/safety hazard.

b. Hot Work areas will be kept clean and free of combustible materials.

c. A fully charged portable fire extinguisher will be located on the job site at all times and provided by the individuals responsible for Hot Work operation.

d. A fire watch will be provided for ALL Hot Work operations and will be responsible for the following:

15 MAY 2001

(1) Ensuring that fire extinguishing equipment is operable and readily available and that the operator knows how to properly use the equipment.

(2) Attempting to extinguish incipient fires, provided the fire can be controlled by the fire extinguishing equipment available.

(3) Becoming familiar with the facilities and knowing the procedures for sounding an alarm and reporting a fire, i.e., auxiliary pull station, fire alarm master box, and telephone (see Chapter 1, paragraph 0112 for telephone numbers).

(4) Remaining on the job site for at least one-half hour after completion of Hot Work operations to ensure that there are no smoldering fires or other hazards.

(5) Notifying the Fire Department of all fires, even if the fire has been extinguished.

0807 TAR KETTLES

a. Prior to use, a Fire Prevention Inspector will inspect tar kettles. An authorization permit will be issued to a qualified operator who will remain with the tar kettle at all times during its use.

b. Lids that can be gravity operated shall be provided on all roofing kettles. Any device used to open or close the lid of a tar kettle will be positioned in such a way that will enable the operator to open or close the lid without standing in front of the opening.

c. Tar kettles used for heating materials will be equipped with proper heating controls, including a means of agitation to assure controlled, uniform temperature of the contents to prevent spot heating.

d. The material will not be heated above the temperature necessary to produce workable fluidity and in no case will it be heated above its flash point.

e. Open flames in a tar kettle while in transit are prohibited.

f. Heating devices or melting kettles will be placed on level, firm foundations and protected from traffic, accidental tipping, or similar hazards.

g. There will be at least two 20BC rated fire extinguishers provided and located within 25-feet of the operating tar kettle.

15 MAY 2001

h. Tar kettles will not be operated inside or on the roof of any building.

EXCEPTION: Under certain circumstances, tar kettles may be allowed to be operated, on the roof of a building with prior approval from the Fire Department.

i. Torch applied roofing systems will be installed in accordance with reference (u).

0808 APPLICATION OF TAR KETTLE MATERIALS

a. When the material is applied within buildings or other enclosed areas, the atmosphere will be free of dust and adequate ventilation will be provided to completely remove smoke and fumes.

b. All smoking, flame devices, and other sources of ignition are prohibited in or near the area of application.

c. Hot substances will not be permitted to be carried up or down ladders.

d. Mops, brushes, and other applicators will be stored in a safe isolated place when not in use.

0809 SPRAY APPLICATION/OPERATIONS

a. Spray application of flammable or combustible liquids will be confined to properly designated and constructed spray booths, spray rooms, or other areas in accordance with reference (u).

b. Spray application operations will not be conducted in any of the following occupancies while occupied:

- (1) Assembly
- (2) Educational
- (3) Institutional
- (4) Residential

EXCEPTION: Interior spray painting of an individual room within any of the above occupancies may be allowed, provided a non-combustible latex type paint is used and adequate ventilation is maintained.

c. Each spray booth will be separated from other operations by not less than 3-feet and will be kept free of storage or combustible materials.

15 MAY 2001

d. There will be no open flame or other ignition source within 50-feet of spray application operations.

e. Only explosion-proof equipment will be permitted to be used in any spraying area.

f. Spray booth, spray rooms, and properly designated spray areas will be protected by an approved automatic suppression system. Sprinkler heads will be covered with plastic no thicker than 3 milliliters before beginning spraying operation.

g. There will be sufficient ventilation to remove flammable vapors, mists, or powders. Combustible residues will be confined and controlled and exhaust systems will be cleaned frequently.

0810 CLEANING OF FLOORS AND BOWLING LANES

When cleaning floors or bowling lanes, the following fire prevention precautions will be observed:

a. Use only approved noncombustible liquids having a flash point above 100°F.

b. Clean one small area at a time.

c. Provide as much natural ventilation as possible.

d. Provide self-closing metal cans for used cleaning rags. Cleaning rags will be removed from the building upon completion of the cleaning operation and/or prior to the close of the workday.

0811 REFINISHING OF FLOORS AND BOWLING LANES

a. Open flames and smoking are prohibited until at least one hour after drying is complete.

b. Residue from sanding machines will be placed in metal cans and promptly removed from the building.

c. Provide as much natural ventilation as possible.

d. The Fire Prevention Office will be notified and will conduct an inspection of the facility prior to any refinishing operation.

15 MAY 2001

0812 REMOVAL OF UNDERGROUND STORAGE TANKS

This paragraph is Storefront to Naval Station Norfolk exclusively.

a. Virginia Regulation VR 680-13-02, Underground Storage Tanks, requires that a permit be issued by the local municipality prior to the removal or change in service of underground storage tanks.

b. The City of Norfolk Fire Department (local municipality) has delegated authority to the Naval Station Fire Department to perform the inspection and issue the required permit for Naval Station, Norfolk.

c. The NAVSTA Norfolk Fire Prevention Office will be notified two weeks prior to the excavation, closure, or transportation of any underground storage tank by the ROICC official, activity, or contractor responsible for the operation.

d. An inspection will be performed by the Fire Prevention Office prior to excavation and again before transportation off base. A permit will be issued in accordance with VR 680-13-02.

e. The activity submitting the underground storage tank closure notification forms will be responsible for submitting a copy of the permit to the Virginia Department of Environmental Quality.

15 MAY 2001

CHAPTER 9FLAMMABLE AND COMBUSTIBLE LIQUIDS0901 GENERAL

a. The use, storage, and classification of flammable and combustible liquids will be in accordance with reference (u).

b. The storage of liquids will not physically obstruct a means of egress. Class I liquids will be so placed that a fire in the liquid storage would not prevent egress from the area.

c. Tools, metal fan blades, etc., used in the vicinity of flammable gases and liquids or hazardous materials, will be non-ferrous or non-sparking type. Non-sparking or non-conductive shoes (as appropriate) will be worn when necessary.

0902 CLASSIFICATION OF FLAMMABLE/COMBUSTIBLE LIQUIDS:

a. Flammable liquids shall be classified as follows:

Class I - any liquid that has a flash point below 100°F (37.8°C)

Class IA - shall include those liquids that have flash points below 73°F (22.8°C) and boiling points below 100°F (37.8°C)

Class IB - shall include those liquids that have flash points below 73°F (22.8°C) and boiling points at or above 100°F (37.8°C)

Class IC - shall include those liquids that have flash points at or above 73°F (22.8°C) but below 100°F (37.8°C)

b. Combustible liquids shall be classified as follows:

Class II - any liquid that has a flash point at or above 100°F (37.8°C) and below 140°F (60°C)

Class IIIA - any liquid that has a flash point at or above 140°F (60°C) but below 200°F (93°C)

Class IIIB - any liquid that has a flash point at or above 200°F (93°C)

0903 DAY TO DAY USE OF FLAMMABLE/COMBUSTIBLE LIQUIDS

Day to day stocks of flammable/combustible liquids will be kept only in areas approved by the Fire Prevention Office for such storage. Amounts of stored materials will be procured as needed and kept in an

15 MAY 2001

approved, labeled, and closed container. Any surplus material will be returned to storage prior to the close of the workday, or when not in use. Storage areas for flammable/combustible liquids will be plainly marked to indicate such storage. A minimal amount of flammable/combustible liquids, i.e., lighter fluid, shoe polish, etc., will be permitted in residences for personal use.

0904 CLEANING OPERATIONS USING FLAMMABLE/COMBUSTIBLE LIQUIDS

a. The use of gasoline, naphtha, thinners, or other flammable or combustible liquids for cleaning parts, floors, decks, etc., is strictly prohibited.

b. Certain combustible liquids will be allowed for cleaning if authorized by the manufacturer for such use.

0905 STORAGE CABINETS

a. Only approved storage cabinets will be used.

b. The design and construction of storage cabinets will be in accordance with reference (u).

c. A maximum of 120 gallons of flammable or combustible liquids will be stored in a storage cabinet. No more than three such cabinets will be permitted to be located in a single fire area, except in an industrial occupancy area.

d. Within an industrial occupancy area, additional cabinets will be permitted to be located in the same fire area, provided the additional cabinets or group of not more than three cabinets are separated from other cabinets or groups of cabinets by at least 100 feet. In an industrial occupancy that is protected by an automatic sprinkler system that is designed and installed in accordance with reference (u), the number of cabinets in any one group shall be permitted to be increased to six.

e. Storage cabinets will be labeled in conspicuous lettering: "FLAMMABLE - KEEP FIRE AWAY."

f. Storage cabinets will be kept neat, orderly, and clean at all times.

g. Storage of other materials such as paper, rags, or other chemicals with flammable or combustible liquids is prohibited.

h. Storage cabinets placed outside will be properly protected from impact and ignition sources.

15 MAY 2001

0906

STORAGE IN CONTAINERS AND PORTABLE TANKS

a. Containers used for dispensing flammable/combustible liquids will be of a type listed for such use by U.L. or approved for such use by F.M. Containers for flammable/combustible liquids will be maintained in good condition and equipped with flame arresters and a spring-loaded cap.

b. Bungs, caps, or stoppers will not be left out of drums, barrels, tanks, empty containers, or flammable lockers.

c. Stored containers will be kept closed and each labeled with its contents.

d. Flammable/combustible liquid containers will not be repaired until all hazardous vapors have been thoroughly removed.

e. Each portable tank will be equipped with at least one device installed in the top to provide sufficient emergency venting capacity.

0907

BULK GENERAL STORAGE OF FLAMMABLE/COMBUSTIBLE LIQUIDS

a. Bulk flammable liquids will be stored in fire-resistant buildings containing firewalls and equipped with an approved automatic sprinkler system.

b. Lubricating oils, paints, grease, and petroleum products will be stored in separate, fire-resistant buildings protected by an approved automatic sprinkler system.

c. Bulk flammable liquids will not be stored with acids or oxidizers.

0908

DISPOSAL OF FLAMMABLE/COMBUSTIBLE LIQUIDS: Gasoline, oil, or any other flammable/combustible liquid will not be discharged into sewers, drains, or any waterway. Disposal will be in accordance with approved environmental methods.

0909

FLAMMABLE/COMBUSTIBLE LIQUID LEAKS AND SPILLS

a. Each command, activity, squadron, or ship having a fuel spill will be responsible for the containment and removal of the spill.

b. Automotive vehicles and other gasoline or electric motors will not be started within 50 feet of a gasoline spill until the exposed area has been thoroughly cleaned. The operation of any vehicle leaking fuel is prohibited until the necessary repairs are made.

c. Contents of leaking containers will be transferred to serviceable containers.

15 MAY 2001

0910 DISPENSING FLAMMABLE/COMBUSTIBLE LIQUIDS

- a. Class I or Class II flammable/combustible liquids will not be drawn from, or dispensed into, tanks or containers within a building, except with the drum in an upright position, using approved type barrel pumps and placed in approved locations, i.e., flammable/combustible liquids storage and dispensing rooms.
- b. Containers other than approved safety cans from which Class III material is dispensed will be equipped with an approved quick closing valve.
- c. Gravity discharge within a building of Class I or Class II flammable/combustible liquids from tanks, drums or containers, other than safety cans, is specifically forbidden.
- d. Liquid storage areas where dispensing is conducted will be provided with either a gravity or a continuous mechanical exhaust ventilation system. Mechanical ventilation will be used if Class I liquids are dispensed within the room.
- e. Splash loading of flammable or combustible liquids is prohibited.
- f. All dispensing operations will be properly grounded and bonded.

0911 FUEL DISPENSING NOZZLES

- a. Nozzles used in connection with gasoline dispensing apparatus will be U.L. listed and be of the manually controlled and automatic closing type.
- b. Operators dispensing flammable/combustible liquids will not leave nozzles or valves unattended while in use.
- c. U.L. listed or F.M. approved ratchets or other hold-open devices are authorized on nozzles of gasoline dispensing apparatus.

0912 FLAMMABLE/COMBUSTIBLE LIQUID VALVES AND FAUCETS

- a. Discharge valves for dispensing flammable/combustible liquids from drums will be spring loaded and manually operated.
- b. Faucets on drums will not be used for dispensing flammable liquids with a flash point below 100°F.
- c. Faucets used on drums for dispensing combustible liquids with a flash point at or above 100°F will be of the approved spring-closing type which will flow only while held open manually. Such drums will be equipped with an approved flame arrester bung vent. Metal drip

15 MAY 2001

pans will be placed under faucets, and blocking faucets open is prohibited.

d. All drums used for dispensing flammable or combustible liquids will be grounded in order to prevent static accumulation, except those containing Class III liquids.

0913 PERSONNEL OPERATING FLAMMABLE/COMBUSTIBLE FUELING EQUIPMENT

a. Only authorized and qualified personnel will operate fueling equipment and they will have a thorough knowledge of the hazards involved and know the regulations for handling flammable/combustible liquids. In addition, they will be familiar with:

(1) The location and operation of the nearest alarm box.

(2) The emergency fire reporting number (See Chapter 1, paragraph 0112 for telephone numbers).

(3) The location and operation of first aid fire fighting equipment.

b. Operators of vehicles or equipment will turn off engine and vehicle lights before taking on fuel.

c. During fueling of vehicles, operators will not smoke or light a match or strike a lighter and there will be no other open flames in the vicinity of the fueling operation.

d. If, upon inspection by a representative of the Fire Department, it is determined that any other operation would impact on, or interfere with, a fueling operation, either the fueling operation or the other operation will be stopped immediately at the Fire Department's request.

0914 TANK VEHICLES TRANSPORTING FLAMMABLE/COMBUSTIBLE LIQUIDS

a. Safety, design, and operating features of tank vehicles used for the transportation of flammable/combustible liquids will be in accordance with reference (u).

b. Every tank vehicle used for the transportation of flammable/combustible liquids will be conspicuously and legibly marked in accordance with the requirements of the U.S. Department of Transportation Hazardous Materials Regulations.

c. All closures for filling, manhole, or inspection openings will be protected from damage that will result in leakage of lading in the event of overturning of the vehicle.

15 MAY 2001

d. Gasoline tank trucks, whether loaded or empty, will not enter or be stored in any building not designed for such purposes. Tank vehicles will be parked in open areas at least 100 feet from buildings and flammable/combustible areas.

e. Tank vehicles used for the transportation of flammable/combustible liquids will be equipped with at least one portable fire extinguisher with a minimum 20 BC rating, or two portable fire extinguishers with a minimum 10 BC rating each.

f. When transferring flammable/combustible liquids, motors of tank vehicles or motors of auxiliary or portable pumps will be shut down during connection and disconnection of hoses. Appropriate pumps approved for transfer of the respective class of liquid will be used. NO SUBSTITUTIONS WILL BE PERMITTED.

g. Fuel trucks having leaking or otherwise defective pumping equipment will not be used.

h. Each cargo tank compartment will be equipped with pressure and vacuum vents.

i. Every cargo tank will be equipped with a rear bumper to protect the tank and piping in the event of a rear-end collision.

j. When dispensing flammable/combustible liquids from tank trucks, grounding cables will be in place and in good condition.

0915 INSPECTION OF TANK VEHICLES

a. Government owned tank vehicles operating within the Navy Regional Fire Rescue Hampton Roads complex that carry flammable or combustible liquids will be inspected on a semi-annual basis by a Fire Prevention Inspector.

b. A command/activity representative will be present during the inspection and will be issued an inspection report noting any deficiencies found.

c. Tank vehicle inspection will include but not be limited to the following:

- (1) Fuel valves and fittings for leaks.
- (2) Fuel delivery hose and nozzle for leaks/deterioration.
- (3) Emergency fuel shut-off valve operational.
- (4) Overturn protection/rear bumper.
- (5) Required fire extinguishers onboard and operational.

15 MAY 2001

(6) Any unsafe or hazardous condition observed.

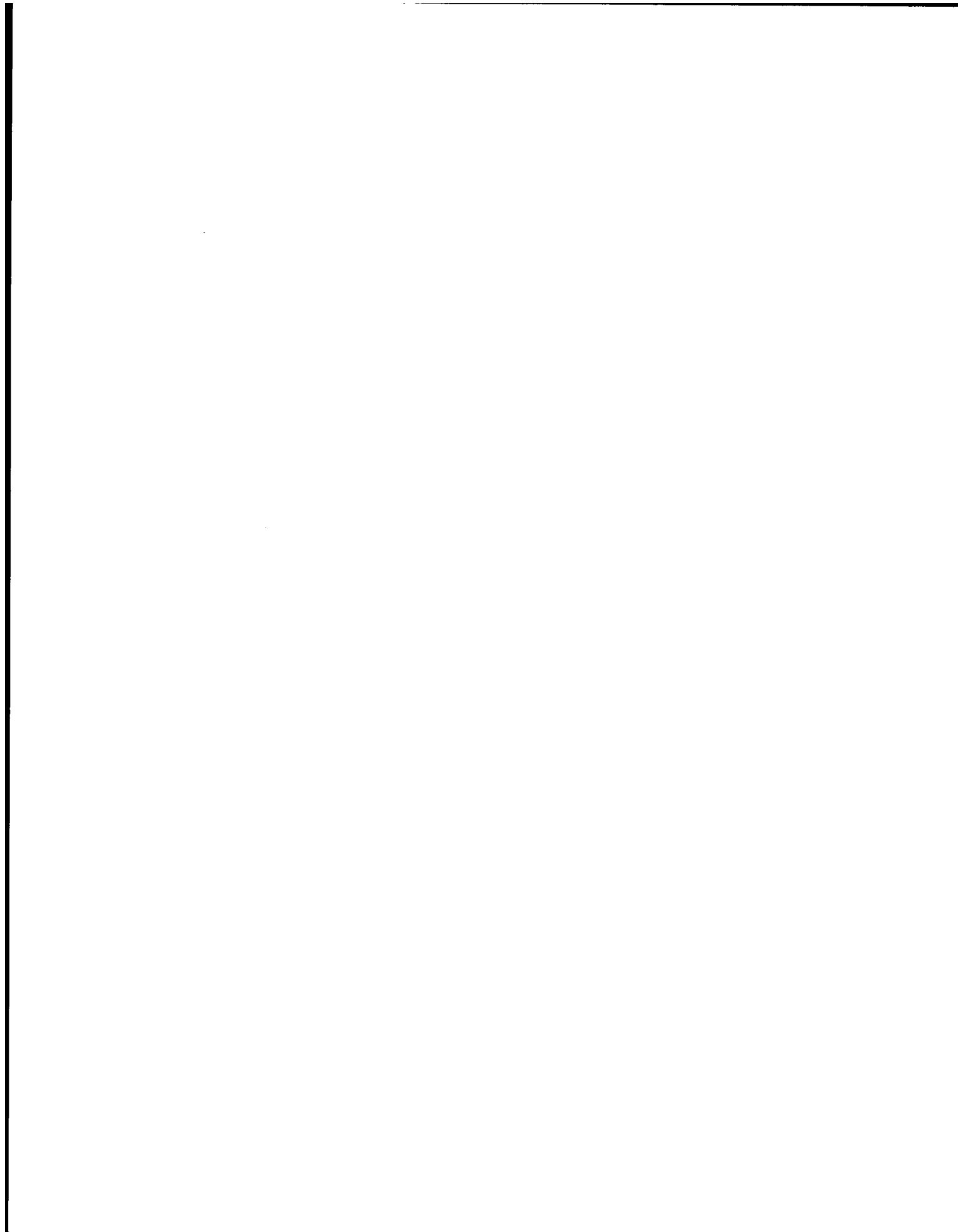
d. The inspection report will indicate the number of days required to correct any deficiencies found as determined by the Fire Protection Inspector, based on the severity of the hazard. Corrective action taken will be noted on the inspection report and returned to the Fire Department within the required number of days.

0916 USE OF FLAMMABLE LIQUIDS IN RADIO/RADAR AREAS

Fueling operations or transfer of liquids having a flash point below 100°F is prohibited in the vicinity of operating high intensity radar equipment, high frequency radio antenna, or antenna down leads.

0917 STORAGE OF GASOLINE POWERED EQUIPMENT

Gasoline powered equipment will only be stored in approved storage locations and in such a way as not to pose a hazard to life or property. In no case will such equipment be stored within occupied areas of buildings.



15 MAY 2001

CHAPTER 10

HEATING APPLIANCES

1001 GENERAL

a. All heat producing appliances used or installed will be either U.L. Listed or F.M. approved.

b. Heat producing appliances will be used and installed in accordance with manufacturer instructions.

c. Coffee makers, toaster ovens, and similar appliances will be located so as to provide a minimum clearance of six inches from combustibles and will not be operated in storage rooms or closets.

d. Toaster ovens, soldering irons, and similar heat producing appliances will be turned off or disconnected prior to close of business each day.

1002 PORTABLE SPACE HEATERS

a. Electric space heaters will be equipped with a thermostat and tip-over safety shut-off switch.

b. Portable heaters will be designed and located so that they cannot be easily overturned.

c. The use of open flame type or direct-fired portable heaters is prohibited.

EXCEPTION 1: In extreme emergency situations, fuel fired heaters may be used as approved by the Fire Department.

EXCEPTION 2: The use of such heating equipment at construction sites will be in accordance with Chapter 5 of this directive.

1003 HEATERS AND HEATING SYSTEMS

a. Heating, ventilation, and air conditioning areas will be kept free of flammable and combustible liquids. Storage within these areas is not normally allowed, except in unusual circumstances with prior written approval from the Fire Department. Good housekeeping practices will be observed.

b. Oil Fired Heaters

(1) All oil-burning equipment will be of the approved type and will be used and installed in accordance with manufacturer's instructions.

15 MAY 2001

(2) Operational switches, shut-off switches, and valves will be provided and will be accessible.

(3) Storage of any kind within boiler rooms is prohibited.

(4) Oil burning equipment will be inspected frequently and periodically maintained by qualified maintenance personnel. Heating units, vent stacks, and flues will be thoroughly cleaned at least once a year.

(5) Safety devices, thermostats, and similar control equipment will be frequently inspected and maintained to ensure proper operation.

c. Liquid Petroleum (LP) and Natural Gas Heaters

(1) The installation, maintenance, and storage of appliances burning natural or manufactured gas will be in accordance with reference (u).

(2) LP or natural gas-fired heaters and stoves will be secured in a fixed position to prevent movement and subsequent development of leaks at connections. Flexible connections will not be used.

(3) All gas-fired heating devices will be equipped with automatic safety pilots (complete shut-off type), approved by the American Gas Association and will be either U.L. listed or F.M. approved.

(4) Gas-fired heating devices will be frequently inspected and periodically maintained by qualified maintenance personnel.

(5) Under no circumstances will matches or open flames be used for leak testing LP or natural gas lines.

(6) In the event of a gas leak, the gas supply will be secured and piping inspected and repaired by qualified maintenance personnel. The Fire Department will be notified.

15 MAY 2009

CHAPTER 11SPECIAL OPERATIONS1101 GENERAL

This chapter provides general guidelines for those operations that are unique or that may create a specific hazard which requires special precautions.

1102 BATTERY CHARGING SHOPS

a. Only authorized personnel qualified in the precautions connected with the hazards of handling acids and charging batteries will be employed in battery charging shops.

b. The battery charging shop will be adequately ventilated near the ceiling line to dispel the hazardous accumulation of hydrogen gas.

c. Air inlet openings at or below the level of the batteries will be required and are essential regardless of the kind of exhaust system employed.

d. Where natural ventilation is used, a vent stack to aid in producing upward draft will be installed.

e. Smoking, open type lights and switches, or flames and flame producing devices will not be allowed in the vicinity of batteries on charge and appropriate warning signs will be posted.

f. Battery vent caps will be in place before attaching or detaching charger cables, and connections between batteries will not be disturbed while the charging switch is "on."

g. The charging rate will be reduced as cells approach full charge.

h. On all circuits where the voltage is in excess of 30 volts, workers shall be insulated from accidental grounding by the use of approved insulating material on the deck around the work area/bench.

(1) Although the use of approved rubber matting is preferred, dry wood, or at least two layers of dry canvas, sheets of phenol material, unapproved rubber mats, or other equivalent insulating material may be used on voltages below 600 volts.

(2) The use of approved rubber matting is MANDATORY for voltages at or above 600 volts.

15 MAY 2001

1103 DUST EXPLOSION PREVENTION

a. All dust-producing equipment, processes, and operations will be performed, installed, and maintained in accordance with reference (u).

b. Suitable dust-collecting equipment will be installed and accumulation of dust will be kept at a minimum in the interior of buildings.

c. Smoking, and the carrying of matches, the use of heat, or spark producing devices, or any open flame is prohibited in areas containing dust producing or dust agitating operations.

1104 INDUSTRIAL OVENS AND FURNACES

Industrial ovens and furnaces will be constructed, installed, and protected in accordance with reference (u).

1105 MECHANICAL REFRIGERATION

a. Mechanical refrigerating units will be classified in accordance with reference (u).

b. All refrigeration systems will be maintained free from accumulations of oil, dirt, waste, and other debris. They will be maintained accessible at all times.

c. All mechanical refrigeration systems will be installed and maintained in a safe manner that will minimize life, health, and fire hazards of the installation.

d. Ammonia refrigeration systems will be provided with an approved system for safely removing the ammonia refrigerant in the event of an emergency.

1106 COMBUSTIBLE FIBERS

All facilities handling or storing combustible fibers will comply with the provisions of this instruction and reference (u).

1107 FIREWORKS

a. Except for command controlled displays, the possession of fireworks for use, sale, or storage is prohibited. Fireworks DO NOT include paper caps or highway flares.

b. Approved handling and storage of fireworks will be in accordance with reference (u).

15 MAY 2001

c. Fireworks displays will be coordinated with the Fire Department to ensure maximum fire safety is observed and to provide for emergency response planning.

1108 EXPLOSIVES

Handling, transportation, and storage of explosive materials will be in accordance with reference (i).

1109 CYLINDER STORAGE, COMPRESSED GAS, AND OXYGEN

a. Storage of compressed gas cylinders will be in accordance with reference (u).

b. When LP-Gas and one or more other compressed gases are stored or used in the same area the containers will be marked in accordance with reference (u).

c. Interior storage of cylinders will require a minimum separation of 20-feet from flammable and combustible liquids and other easily ignited materials.

d. Separate rooms or buildings used for cylinder storage will be well ventilated.

e. Cylinders that are stored outside will be shielded from the sun.

f. Compressed gas cylinders will be stored "valve end up" and will be properly secured in place.

g. Cylinders, when not in use, will have their valves closed and caps placed over the valve whether empty or full.

h. Oxygen cylinders will not be stored in generator or mechanical rooms.

i. Oxygen cylinders will not be stored within 20-feet of fuel gas cylinders or combustible materials except when a non-combustible barrier is provided, at least 5-feet high having a fire-resistant rating of at least a half hour.

j. "NO SMOKING WITHIN 50 FEET" signs will be conspicuously posted.

k. Compressed gas cylinders showing evidence of excessive rust, corrosion, dents, or other surface defects will be considered hazardous and will be properly discharged and disposed of.

l. Compressed gas cylinders which have not had the required Interstate Commerce Commission (ICC) hydrostatic test (every five

15 MAY 2001

years), or which have markings or labels obscured, will be returned for testing before recharging.

1110 SHIPPING AND TRANSFERRING GAS CYLINDERS

a. Cylinders and discharge valves will be handled with care so that they are not dropped or allowed to strike forcefully against each other or any object. Outlet and protecting caps will be in place prior to the moving of cylinders.

b. When loading or transferring cylinders they will be secured in a cradle or suitable platform or rack.

c. When a hand truck moves cylinders they will be securely fastened to the truck to prevent slippage.

1111 HAZARDOUS MATERIALS

The use and handling of hazardous materials and hazardous waste will be in accordance with Storefront regulations and reference (u).

1112 LABELING OF HAZARDOUS MATERIALS

a. Activities will be required to label any hazardous material not already labeled when received. The National Fire Protection Association (NFPA) 704M label, (Appendix 11-A) will be used as the hazard warning to meet this requirement. Existing manufacturers labels will not be removed, defaced, or covered when affixing the NFPA 704M label. Information needed for completing NFPA labels can be obtained from Material Safety Data Sheets.

b. The NFPA 704M label provides a system of easily recognizable and easily understandable markings. This system identifies the hazards of a material in terms of three principle categories - "health", "flammability", and "reactivity", (instability). The label indicates the order of severity numerically by five divisions ranging from 4 (severe hazard) to 0 (no special hazard). The top space is always red in color and indicates the fire hazard. The right-hand space is yellow and gives reactivity hazards. The left-hand space is blue and specifies the health hazards. The fourth space, at the bottom of the diagram, is white in color and should be used to indicate unusual reactivity with water.

(BLUE)

HEALTH HAZARD

4 DEADLY
3 EXTREME DANGER
2 HAZARDOUS
1 SLIGHTLY HAZARDOUS
0 NORMAL MATERIAL

(RED)

FIRE HAZARD

FLASH POINTS
4 BELOW 73 degrees Fahrenheit
3 BELOW 100 degrees Fahrenheit
2 200 degrees Fahrenheit or below
1 ABOVE 200 degrees Fahrenheit
0 WILL NOT BURN

15 MAY 2001

(WHITE)		(YELLOW)
<u>SPECIFIC HAZARD</u>		<u>REACTIVITY</u>
OXIDIZER	OXY	4 MAY DETONATE
ACID	ACID	3 SHOCK & HEAT MAY DETONATE
ALKALI	ALK	2 VIOLENT CHEMICAL CHANGE
CORROSIVE	COR	1 UNSTABLE IF HEATED
USE NO WATER	-W-	0 STABLE

c. DEGREES OF HAZARD

(1) Flammability Hazards - The degrees of hazard are ranked according to the susceptibility of materials to burning.

(a) A "4" is assigned to materials which will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature, or which are readily dispersed in air and will burn readily.

(b) A "3" is assigned to liquids and solids that can be ignited under almost all ambient temperature conditions.

Materials having a flash point of 73 to 100°F are assigned a "3".

(c) A "2" is assigned to materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials having a flash point between 100 and 200°F are assigned a "2".

(d) A "1" is assigned to materials that must be pre-heated before ignition can occur. Materials having a flash point of 200°F and above are assigned a "1".

(e) A "0" is assigned to materials that must be pre-heated before ignition can occur.

(2) Health Hazards - Health hazards deal with the capacity of material to cause personal injury from contact with or absorption into the body. There are two sources of health hazards - one arises out of the inherent properties of the material, and the other arises out of the toxic products of combustion or decomposition of the material. The hazard degree should be assigned on the basis of the greatest hazard that can exist under fire or other emergency conditions. The degree of hazards is ranked according to the probable severity of hazard to personnel.

(a) A "4" is assigned to materials which on very short exposure could cause death or major residual injury, even though prompt medical treatment is given.

15 MAY 2001

(b) A "3" is assigned to materials which on short exposure could cause serious temporary injury, even though prompt medical treatment is given.

(c) A "2" is assigned to materials which on intense continued exposure can cause temporary incapacitation or possible residual injury, unless prompt medical treatment is given.

(d) A "1" is assigned to materials which on exposure can cause irritation, but only minor residual injury, even if no treatment is given.

(e) A "0" is assigned to materials which on exposure under fire conditions would offer no hazard beyond that of ordinary combustible material.

(3) Reactivity Hazards - The degrees of hazard are ranked according to ease, rate, and quantity of energy released.

(a) A "4" is assigned to materials which are readily capable of detonation, explosive decomposition, or reaction at normal temperatures and pressures.

(b) A "3" is assigned to materials which are capable of detonation or having an explosive reaction but require a strong ignition source. Additionally, this designation pertains to materials that must be heated under confinement before ignition or which react explosively with water.

(c) A "2" is assigned to materials which are unstable and readily undergo violent chemical change but do not detonate, and materials which may react violently with water or which may form potentially explosive mixtures with water.

(d) A "1" is assigned to materials which are normally stable but which can become unstable at elevated temperatures and pressures, or materials that may react with water with some release of energy, but not violent energy.

(e) A "0" is assigned to materials which are normally stable even under fire exposure conditions and do not react with water.

(4) The NFPA 704M labels are available through the supply system.

1113

CHEMICALS REACTING WITH WATER

a. Some chemicals must be stored in fire resistive structures without automatic sprinkler protection. These include calcium

15 MAY 2001

carbide, un-slaked lime, sodium and potassium peroxide, chlorine dioxide, metallic calcium, and other chemicals that react violently with water. They will never be stored in a building containing combustibles or valuable materials. If the quantities are minimal, they may be stored in small, detached non-combustible warehouses. Such storage, wherever located, will be specifically designated by signs to advise the Fire Department of the nature of the materials contained.

(1) Calcium carbide will be stored in metal containers conspicuously marked "CALCIUM CARBIDE - DANGEROUS IF NOT KEPT DRY".

(2) Each area of the building in which calcium carbide is handled, stored, or used will have signs easily seen reading "CALCIUM CARBIDE - DANGEROUS IF NOT KEPT DRY - KEEP WATER AND FLAMES AWAY".

b. Water-resistive chemicals will be stored on a platform, shelf, pallet, or skid not less than six inches above the floor. These liquids will not be stored below the adjoining ground or grade level (unless in a waterproof cabinet).

c. Exposed water, steam, or condensation lines will not be permitted in water-resistive flammable/combustible chemical storage areas.

d. Storage of water-reactive flammable/combustible chemicals will be in a dry, waterproof, well-ventilated location.

1114 ORGANIC OILS

Substances such as linseed oil, cottonseed oil, fish oil, and castor oil are susceptible to spontaneous heating when in contact with combustible fiber, cloth, or mattresses. Generally speaking, these materials do not present serious problems of ignition if kept segregated from combustibles and porous or fibrous materials. They will, however, be stored in separate fire-resistive buildings having automatic sprinklers.

1115 STORAGE OF HAZARDOUS MATERIALS

a. The storage of hazardous materials will be in accordance with Storefront regulations and references (d), (e), and (m).

b. Hazardous materials storage facilities will be designed and constructed to offer protection against the physical, health, or environmental hazards presented by the material.

c. Storage areas will be designed to prevent surface or groundwater contamination in the event of a spill or leak, and to capture completely each class of material individually.

15 MAY 2001

d. Mixed occupancy buildings will not house hazardous materials storage and handling operations. Under no circumstances will office buildings contain hazardous material storage and handling operations.

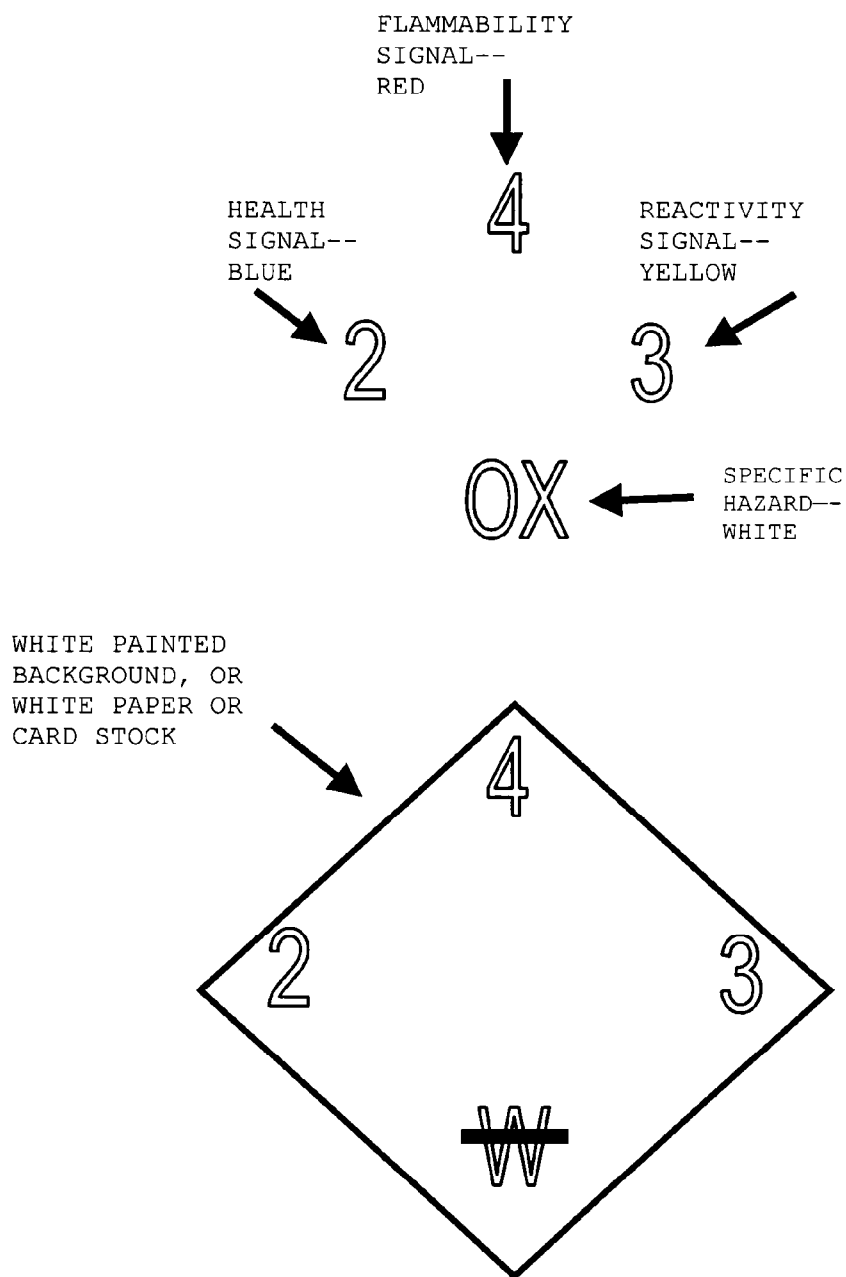
1116 STORAGE OF HAZARDOUS WASTE

a. The storage of hazardous waste will be in accordance with Storefront regulations and references (d) and (1).

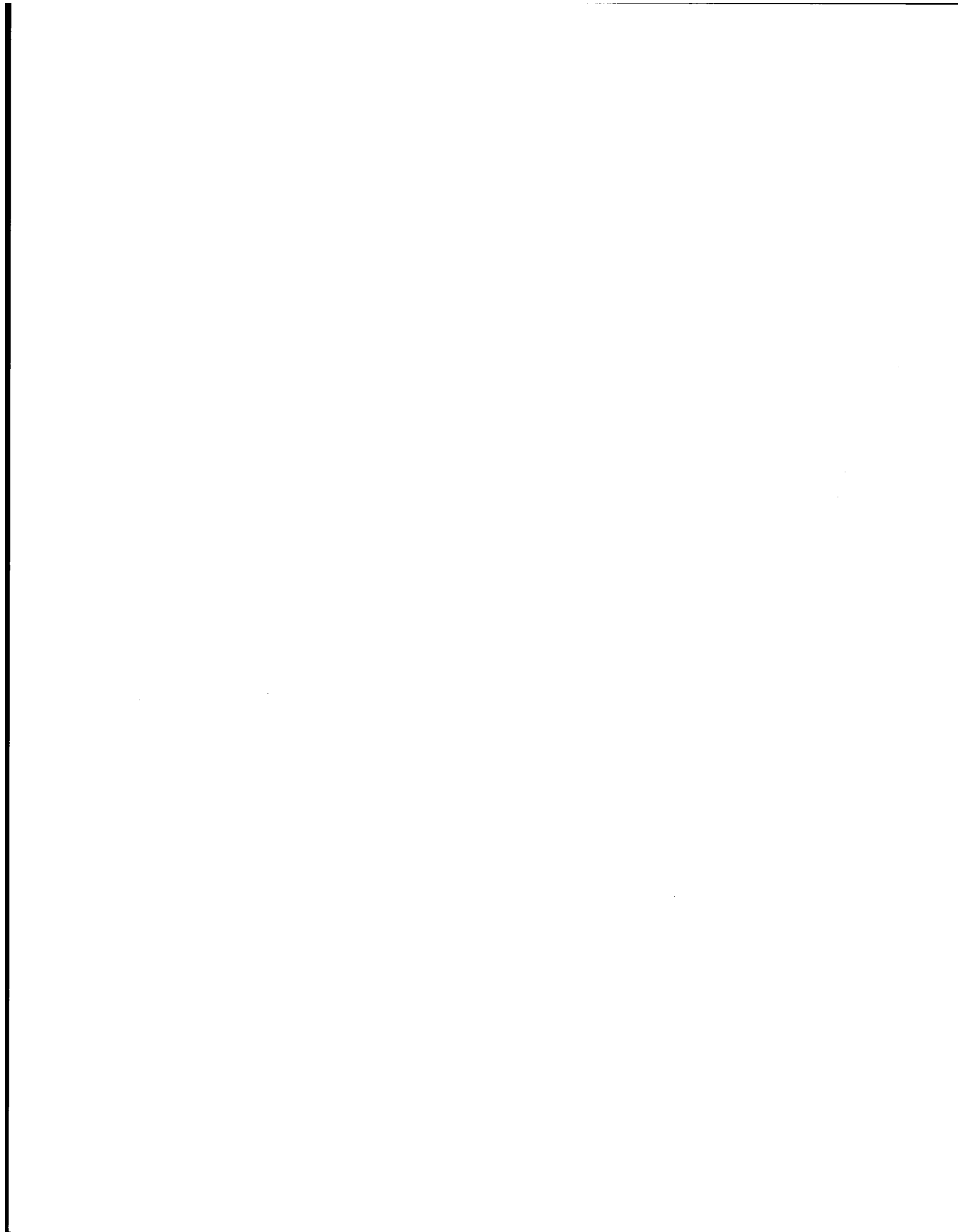
b. Hazardous waste storage facilities will be designed to store non-leaking containers labeled in accordance with Department of Transportation (DOT)/Environmental Protection Agency (EPA) criteria.

c. Container storage areas will have provisions for containing leaks, spills, and accumulated precipitation.

15 MAY 2001



APPENDIX 11-A



15 MAY 2001

CHAPTER 12WATERFRONT FIRE REGULATIONS1201 GENERAL

a. Operations conducted at piers and waterfront will be in accordance with reference (s).

b. Ships berthed at piers will be responsible for fire prevention, storage, and handling of materials and proper cleanliness alongside their berths. Open fires or incinerators on the piers are prohibited.

c. Both ship officers and shore side supervisors shall ensure that effective fire prevention measures be observed during any dockside operations.

1202 ACTIONS IN CASE OF FIRE

a. Fires on any ship at any of the piers will be reported to the ECC/Fire Dispatch via fire alarm boxes and telephone. Under no circumstances will such notification be delayed from the belief that the fire is trivial or already extinguished.

b. In the event of a fire on one of the piers or aboard a ship at one of the piers, any ships affected by the fire or berthed near the fire will be prepared to move from the pier under their own power or by use of tugs, if required.

c. Upon arrival on the scene of any ship involved in fire, the senior fire officer or representative from the Fire Department will report to the ships Officer of the Day (OOD) and ascertain if assistance is required.

(1) If assistance is requested, firefighting efforts will be coordinated with the ship's authorized representative and the senior Fire Department officer or representative.

(2) If the Fire Department is requested to stand by, the senior fire officer or representative from the Fire Department will determine the equipment necessary to remain on the scene, based on the circumstances.

(3) If no assistance is required or standby desired by the ship's OOD, the Fire Department will secure from the scene provided no hazard exists to the pier or base property.

d. Naval vessels at the piers will dispatch rescue and assistance parties, together with fire equipment and accessories, upon request from the senior fire official or designated representative. They will

15 MAY 2001

take orders only from the senior fire official or designated representative in operations incident to fighting the fire. They will remain at the scene until dismissed by the senior fire official or designated representative.

e. In the event of a fire at the piers or onboard ships at the piers or Deperming Station, ECC/Fire Dispatch will immediately notify the Service Craft Dispatcher and Port Services Department. The dispatcher will promptly send tugs to report to the senior fire official, or their designated representative at the scene of the fire for the purpose of assisting ships from piers or assisting in fighting the fire, as may be directed. In the event the Commanding Officer of a ship is in doubt as to the necessity for his ship being moved from the vicinity of the fire, the decision will be made by the Installation Commander (IC), or the Installation Command Duty Officer (CDO).

f. The Port Services Department will select and designate anchorage areas for the disposition of vessels on fire and will instruct the proper tug master/boat captains accordingly. The areas selected for this purpose will be such that the depth is suitable for scuttling the ship to extinguish the fire if required.

1203 FIRE LANES ON PIERS

a. Fire lanes of at least 20-feet in width will be maintained down the center pathway or as near center as practical, of piers for the entire length of the same.

b. The entire width of the pier for a minimum of 50-feet in length at both the head and foot of the pier will be designated a fire lane to accommodate turnaround space and provide a designated location to obtain overboard drafting for water supply for fire apparatus.

c. Fire lanes will be painted or marked off in bright yellow. Also, the area at the head and foot will be diagonally striped with yellow paint or markers. Other contrasting colors may be used at the discretion of the respective IC.

d. The words "FIRE LANE - NO PARKING" will be marked at 300-foot intervals the entire length of the pier. Letters will be a minimum of 6" and painted yellow, white, or other contrasting color at the discretion of the Installation Commander.

1204 FUELING OF EQUIPMENT ON PIERS

a. The fueling or de-fueling of any type of mobile equipment on wooden piers or wharves is prohibited.

15 MAY 2001

b. Gasoline trucks are prohibited on wooden piers or wharves and gasoline for refueling equipment on barges will be transported in approved safety cans.

1205 DOCKSIDE FUELING OPERATIONS

a. Fire Protection

(1) Fueling operations will not be conducted at any pier by a vessel without prior inspection and approval from the Fire Prevention Office. This approval will be in the form of a permit, issued by a Fire Prevention Inspector.

(2) The ships fire hoses and other fire fighting equipment will be connected and ready for immediate use during fuel transfer operations.

(3) A competent hose watch will be provided from the ship's company for all fuel transfer operations. The hose watch will stand by at all times to raise or lower the hose, to watch for strains or chafing of the hose, to close the ship's valves or to signal to the pump man in the event of emergency, or upon receipt of signal from the wharf man.

(4) The BRAVO FLAG will fly during all fueling operations.

b. Duties

(1) An experienced supervisor will be in charge of dockside operations when any fuel transfers are started or stopped. The location of the supervisor will be known by shipboard personnel at all times during the fueling operations, and be readily available in the event of an emergency. Ships and submarines being fueled by pipeline or fuel tanker truck will provide one person on the ship with headphones and one person on the pier (hose watch) with headphones for communications from ship to pier.

(2) The principal assistants (wharf man and hose watch) will have a thorough understanding of established rules and regulations governing fuel transfer operations. Upon notice of violations, or rules and regulations omissions that endanger the operation, the fuel transfer operations will be halted until the unsafe condition has been corrected.

(3) At least one experienced and responsible wharf man, in addition to the hose watch, will remain on duty at dockside during the entire period of bulk cargo transfer. The hose watch will stand by at all times to close the wharf valve and order pumping or gravity transfer stopped on signal from the ship or in event that a spill or leak is observed. Spills or leaks will be cleaned up before fuel operations are resumed.

15 MAY 2001

(4) Personnel engaged in fuel transfer operations will not leave their assigned duty post until properly relieved.

c. Source of Ignition

(1) The smoking lamp will be out aboard a ship involved in gasoline handling operations, as well as aboard any other vessel within 200-feet of such ships. The smoking lamp will be put out prior to the start of operations and remain out until the Commanding Officer of the ship concerned deems it safe to remove the restriction. However, in no case will smoking be permitted until 15 minutes after completion of the operations. Similarly, smoking will not be permitted in any area within 200-feet of a ship engaged in gasoline transfer operations.

(2) All sources capable of igniting gasoline vapors will be prohibited within an area of at least 200-feet of a ship engaged in gasoline transfer operations, including those sources aboard other vessels, and such obvious sources of ignition as smoking, open flame and fires, other hazards including motor vehicles, power boats, locomotives, light, friction sparks, cranes, and mechanical devices. Under some conditions, the foregoing minimum conditions may have to be increased.

(3) Prior approval from a Fire Prevention Inspector will be obtained before transferring gasoline from barge to ship outboard.

(4) Streets or roadways leading to piers and wharves at which gasoline transfers are being made will be effectively barricaded at a minimum of 200 feet from the transfer area.

(5) Personnel engaged in loading or unloading gasoline or flammable liquids with flash points below 100°F will not wear boots with exposed metal objects in soles or heels.

(6) Only non-sparking tools will be permitted to be used within the restricted area surrounding gasoline transfer operations.

(7) Only those electrical devices listed by U.L. for use in hazardous locations will be permitted in gasoline handling areas. Installation of temporary electrical devices will not be permitted in such areas.

(8) Transfer of any fuel is prohibited during electrical storms except under emergency circumstances.

(9) The loading or discharging of gasoline, JP-5, kerosene, or highly flammable liquids during the hours of darkness is prohibited. When operational necessity precludes compliance, permission for waiver

15 MAY 2001

will be requested from SOPA (ADMIN) Hampton Roads, during normal working hours via IC, via the IC CDO.

(10) Energized radar will not be aimed in the direction of operations involving fuels or fuel handling, explosives, or transfers of ammunitions.

d. Bonding

(1) Static bonding devices will be in place and secured between ship and pipeline before the fueling hose is connected and left in place until after such hose is disconnected.

(2) Before permitting a gasoline powered boat to fuel from shore, a proper bonding connection will be made. These connections will be made of wire or solid metal to ensure positive contacts are made.

(3) Bonding is required where the use of metallic hose is not practical, and a separate container is used to power gasoline into the boat tanks. Such containers will first be bonded with the boat tanks by a flexible conducting cable or wire.

e. Ships will not take on discharged bulk gasoline or aircraft fuels beyond 80% capacity in any one tank (except JP-5 for which 95% is permissible) while berthed at the piers, except in an emergency, and then only with the approval of the IC. When transferring bulk gasoline from ship to barge, or from barge to ship while at the piers, the barge will be on the outboard side of the ship. Gasoline spill (overflow) upon the surface of the water within 1,000-feet of any of the Storefront piers will be reported immediately to the Storefront emergency activities.

f. Fueling of ship's boats at wooden piers is prohibited.

g. NO FUELING is permitted at the same pier simultaneously with ammunition handling.

h. When any ship is loading or unloading aircraft in service condition containing fuel, it is prohibited for any ship at the pier to load or discharge ammunition or liquid oxygen.

i. The transfer of sludge, etc., to a donut or tank truck on the pier is classified as a fueling operation. Where the availability of the pier connections permit the discharge of such residues directly into a pier or shore collection system, no restrictions on simultaneous discharge or ammunitions handling are required, other than exercise of prudence and common sense.

15 MAY 2001

1206 LIQUID OXYGEN

a. Only qualified operating personnel with full cognizance and understanding of operating procedures will be permitted to handle charging and/or off-loading of liquid oxygen.

b. Extreme care will be taken to prevent liquid oxygen from spilling or dripping upon asphalt, wood, oil covered concrete, or any other combustible material. If spillage or dripping on the ground cannot be prevented by the charging unit or truck design, the equipment will be positioned over an unpainted metal tray. This tray will be large enough to catch any liquid that may spill.

(1) Charging units or trucks that contain provisions for preventing such conditions may be used with no special guidelines. The length and width of the tray will exceed the charging units comparable dimensions by three feet and have a depth of at least 10 inches. A ramp will be provided to catch any liquid which may spill.

c. Rope off an area within a 50-foot radius of the charging unit and the area through which the charging line passes and clear all vehicles, cranes, or other equipment which are not required during oxygen charging operations.

(1) All combustibles will be removed.

(2) "NO SMOKING" signs will be located prominently around the perimeter of the roped off area.

d. Provide suitable illumination for night charging operations for the entire charging area.

e. Prohibit smoking, charging batteries, painting, fueling, and loading or off-loading of ammunition in the vicinity during charging operations.

1207 WELDING AND BURNING OPERATIONS

Prohibited as follows:

a. Within 200-feet of any ship loading or discharging bulk gasoline, liquid oxygen, JP-5, kerosene, or grade heavy boiler fuel oil, or other flammable liquids.

b. Within 200-feet of the transfer of drummed gasoline, alcohol, JP-5, kerosene, or grade heavy boiler fuel, or other flammable liquids.

c. Within 100-feet of any ship loading or unloading aircraft in service condition containing fuel.

15 MAY 2001

- d. Within 500-feet of any ship handling explosives.

1208 FIRE PROTECTION RESPONSIBILITIES FOR DECOMMISSIONING SHIPS

a. During ship decommissioning, the ship's Commanding Officer retains sole responsibility for fire protection aboard the ship.

b. Assistance from the Fire Department during periods of ship decommissioning can, and will, be provided to supplement fire protection requirements. However, the ship, throughout their stay at the Storefront location, will provide the following minimum fire protection.

(1) Maintain sufficient damage control equipment to support the ship and tow ship requirements.

(2) Quarterdeck and sounding/security watches will be continuously maintained.

(3) Maintain sufficient duty section fire party response teams to provide initial fire fighting capabilities.

(4) Fire hoses will be rigged throughout the ship to provide primary fire attack. Hook up lines will be in all spaces.

(5) Provide emergency diesel fire pumps on the pier with hose lines attached to support ship functions.

(6) Provide sufficient portable CO2 fire extinguishers for Class "C" fires.

(7) Provide ship familiarization tour for Storefront firefighters.

1209 AIRCRAFT OPERATIONS

a. FLIGHT OPERATIONS

(1) No flight operations will be conducted at any Storefront pier without specific authorization from the IC, via the Port Operations Officer.

(2) The Fire Department will be notified and a Fire Prevention Inspector prior to the start of any flight operation will inspect the pier area. The inspector for this operation will issue an authorization permit.

(3) The ship involved in the flight operation will have fire fighting equipment laid out and fire party personnel standing by. Hoses will be equipped to produce foam. The fire party will be

15 MAY 2001

equipped with all necessary forcible entry tools required for immediate rescue.

(4) All petroleum products handling at the berth involved and adjacent berths (across pier) will cease for the duration of flight operations. Fuel hoses need not be disconnected.

(5) Ordnance handling evolution's and flight operations will not be scheduled simultaneously.

(6) In no case will shipboard flight operations at the piers be authorized if the aircraft is carrying live ordnance.

b. ON/OFF LOADING AIRCRAFT

(1) The Fire Department will be notified and a Fire Prevention Inspector will inspect the pier area prior to the start of any aircraft on/off loading operation. The inspector for this operation will issue an authorization permit.

(2) If the aircraft to be on/off loaded contains fuel, ship's fire parties will be stationed on the flight deck and on the pier. Hose lines are not required to be charged but should be equipped to flow foam if firefighting operations are required.

1210 HANDLING OF AMMUNITIONS

a. The handling of ammunitions at piers and waterfront will be in accordance with Storefront regulations.

b. Ships loading or unloading ammunition will have firefighting equipment in complete readiness before commencing operations.

c. Hot work will not be performed at, or alongside, an authorized ammunition handling location simultaneously with ammunition handling at the same berth unless such hot work is in a tender and confined to those spaces specifically designated in writing by the tenders' Commanding Officer.

d. Hot work at other berths of the same pier or slip may be performed subject to the following restrictions.

(1) Hot work inside the skin of a ship (not exposed) may be performed at any berth other than the berth at which ammunition is being handled.

(2) Exposed hot work (that outside the skin of a ship) will not be performed within 500-feet of any ammunition handling.

e. Fueling operations will be prohibited at the same pier simultaneously with ammunition handling for logistic support. The

15 MAY 2001

transfer of sludge, etc., to a tank truck on the pier or a "donut" alongside will be considered in the same category as a fueling operation.

f. Gasoline or JP-4 (either in bulk or drums), oxygen, compressed flammable gases, or any other highly hazardous material will not be handled at the same pier or in the same ship, with ammunition handling.

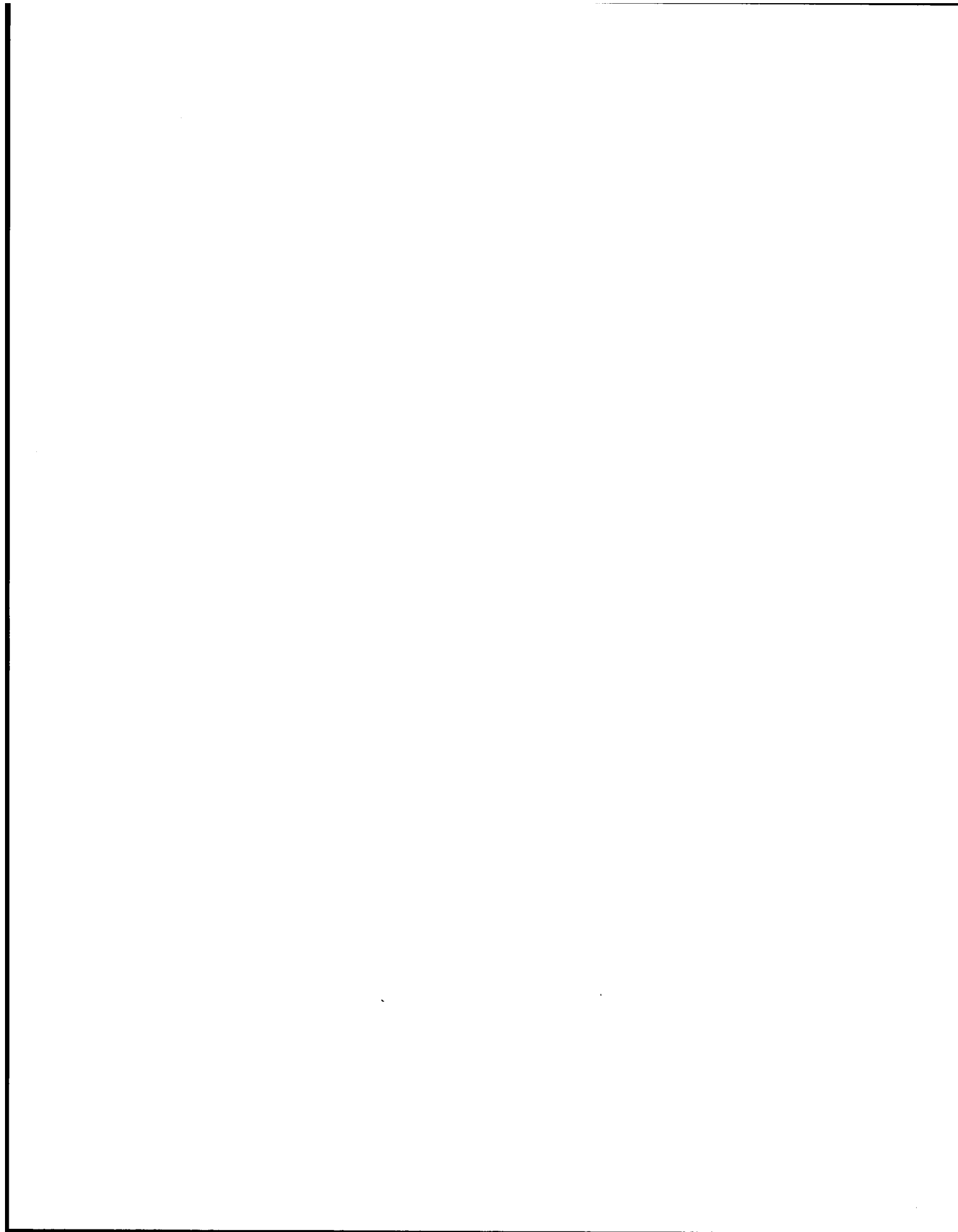
g. Smoking is prohibited when handling ammunition, except in locations on board ship designated by the IC.

h. No lighters, matches, or flame producing devices will be carried on any person either engaged in or in the vicinity of ammunition handling operations.

i. Ammunition handling will be secured during local atmospheric disturbances.

j. Handling operations will not commence until the pier is cleared of any obstacle that could impede access of firefighting or other emergency vehicles.

k. Pier vehicular traffic will be limited to fire, ambulance, and that equipment required to support the handling of ammunition.



15 MAY 2001

CHAPTER 13AIRCRAFT FIRE REGULATIONS1301 AIRCRAFT HANGARS

General guidance for aircraft hangars are:

- a. Privately owned vehicles shall not enter aircraft hangars.
- b. Aircraft servicing vehicles or any other internal combustion engine powered equipment should not enter aircraft hangars unless necessary for aircraft maintenance and servicing. They should not be stored in a hangar unless absolutely necessary, and then in a segregated area at least 25-feet away from any aircraft. Maintenance on such units will not be carried on in hangars.
- c. The arrangement of aircraft in hangars shall be carefully planned to permit rapid removal in case of emergency. Tow bars should be installed on nose gear ready for immediate use, brakes released and, if practicable, a tow tractor should be hooked up ready for start up and use. Unobstructed area in front of aircraft hangar door shall be maintained at 1-1/2 the width of the largest aircraft allowed to be parked inside the hangar to permit rapid removal of the aircraft in case of emergency.
- d. Metal pans should be placed under aircraft wherever needed to collect oil or hydraulic leakage. Fuel from venting or leaks shall be contained and disposed of in accordance with fire, safety, and environmental regulations.
- e. Welding inside hangars on aircraft is prohibited, except in extreme cases. In such cases, a special welding permit shall be obtained from the Fire Department which may issue such permit upon a thorough investigation of circumstances and compliance with provisions set forth in Chapter 8 of this instruction and reference (u).

1302 SPECIFIC APPLICABILITY

a. General fire prevention measures outlined in Chapters 3 and 4 of this directive apply to aircraft hangars as in other occupancies. However, the following items are specifically applicable to aircraft hangars.

(1) Fuels

(a) Fueling or de-fueling of aircraft within any hangar is prohibited in any form or way. Aircraft fueling shall not be conducted within 50-feet of any structure.

15 MAY 2001

(b) Aircraft fuel trucks shall neither enter nor be stored in aircraft hangars.

(c) Aircraft fuel tank maintenance shall be conducted in strict compliance with reference (u). Under no circumstances shall aircraft fuel cells be purged inside hangars.

(d) Automotive equipment and internal combustion engine driven ramp equipment shall be fueled from standard fueling facilities at least 25-feet from any hangar.

(e) Accidental discharge of aircraft fuels or any other combustible liquids on hangar decks shall be cleaned-up and disposed of outside hangar immediately.

(f) Aircraft fuels tanks should not be loaded prior to entering hangar to the extent that thermal expansion would result in overflow from tank vents.

(g) Fuel dripping or leaks from aircraft inside hangars shall be repaired as soon as possible.

(2) Housekeeping

(a) Good housekeeping in hangars, shops, work docks, and other aircraft maintenance areas is essential to fire and personnel safety, efficient aircraft maintenance, and indirectly essential to flight safety. The highest standard of cleanliness and order shall be observed in all aircraft maintenance areas.

(b) Any ample number of waste receptacles shall be provided on any hangar deck and in shop area. Subject receptacles shall be of non-combustible material and provided with a tightly fitted lid.

(c) Spills of fuel, oil, fluids, etc., shall immediately be cleaned and disposed of properly.

(d) Covered metal containers shall be provided and used for storing supplies of clean rags and other combustible materials.

(e) Solvents with a flash point of 100°F or less shall not be used for cleaning aircraft, parts, or any other cleaning.

(f) Supplies of paint, thinners, and other flammable solvents shall be stored in accordance with reference (u).

(g) Spray painting of aircraft inside hangars is prohibited except for minor touch-up operations. During such operations, ample ventilation shall be provided and no other maintenance work shall be performed on or around the aircraft.

(h) An ample number of drip pans shall be provided under aircraft to collect any dripping of hydraulic fluid or oils while aircraft is in the hangar.

(i) An ample number of fuel containers shall be provided under aircraft to collect any dripping of aircraft fuel while aircraft is in the hangar.

(3) Electricity

(a) Electrical equipment used on hangar decks, i.e., portable equipment and lamps, cutouts, switches, receptacles, charging panels, generators, motors, etc., shall be of the totally enclosed type or suitable for Class 1, Division 2 hazardous locations or up to a level 18 inches above the floor.

(b) Pendants and flexible extension cords used on hangar deck areas shall be approved for extra hard usage and they shall be maintained in good condition at all times - otherwise, they will not be used. Each such cord shall include a separate grounding conductor.

(c) Aircraft batteries shall not be charged when installed in aircraft located inside a hangar. Charging nickel-cadmium batteries shall be segregated from lead-acid battery-charging operations.

(d) Electric converters or rectifier units used to energize aircraft power systems shall be suitable for the hazard location when used in hangars. Those shall not be positioned under aircraft wings or engines.

(e) Engine driven generators should not be used to energize aircraft power systems inside hangars. If used, they shall be located close to exterior doors where ample ventilation is provided and positioned at least 20-feet from aircraft fuel system vent openings.

(f) Mobile servicing equipment such as air compressors, air movers, portable heater units, and vacuum cleaners shall not be in the vicinity of the aircraft. Vicinity of aircraft is the area within 5 feet horizontally from aircraft power plants or aircraft fuel tanks and shall be classified as a Class I, Division 2 location that shall extend upward from the floor to a level 5-feet above the upper surface of wings and of engine enclosures.

(g) All aircraft shall be grounded while inside any hangar.

15 MAY 2001

(h) Vending machines, cooled drinking fountains, etc., shall not be installed on hangar decks unless suitable for Class I, Division 2 hazardous locating.

(4) Life Safety

(a) All doors designated as exits shall swing in the direction of exit travel, except sliding doors, and shall be kept unlocked and unrestricted in the direction of exit travel while the area is occupied.

(b) Exit signs shall be provided over doors and exit ways with letters at least 6 inches high on a conspicuous background.

(c) Fire drills in aircraft hangars shall be conducted in accordance with reference (u).

1303 HANGAR FIRE LANES

a. Hangar fire lanes will be 10-feet wide. This clearance is the egress lane adjacent to walls to allow for adequate egress from the hangar bay, shops, and offices.

b. Clearly marked hangar center aisles in drive through hangar (older hangars with aircraft entry from opposite ends) bays shall be maintained at all times to allow for egress of aircraft and fire fighting vehicles during emergencies.

1304 ORDNANCE

a. Use, handling, and storage of ordnance will be in accordance with reference (i).

b. Transportation of ordnance will be in accordance with reference (j).

c. Any operation that involves the use, handling, transportation, or storage of ordnance will be under the strict control of Storefront Weapons/Ordnance Departments.

1305 AIRCRAFT FUELING OPERATIONS

a. Aircraft fueling operations shall be in accordance with the requirements of reference (h).

b. Only authorized personnel trained in the safe operation of the equipment they use, in the operation of emergency controls, and in procedures to be followed in an emergency will fuel or de-fuel aircraft.

15 MAY 2001

c. Prior to making any fueling connection to the aircraft, the fueling equipment will be bonded to the aircraft by use of a cable. The bond will be maintained until fueling connections have been removed.

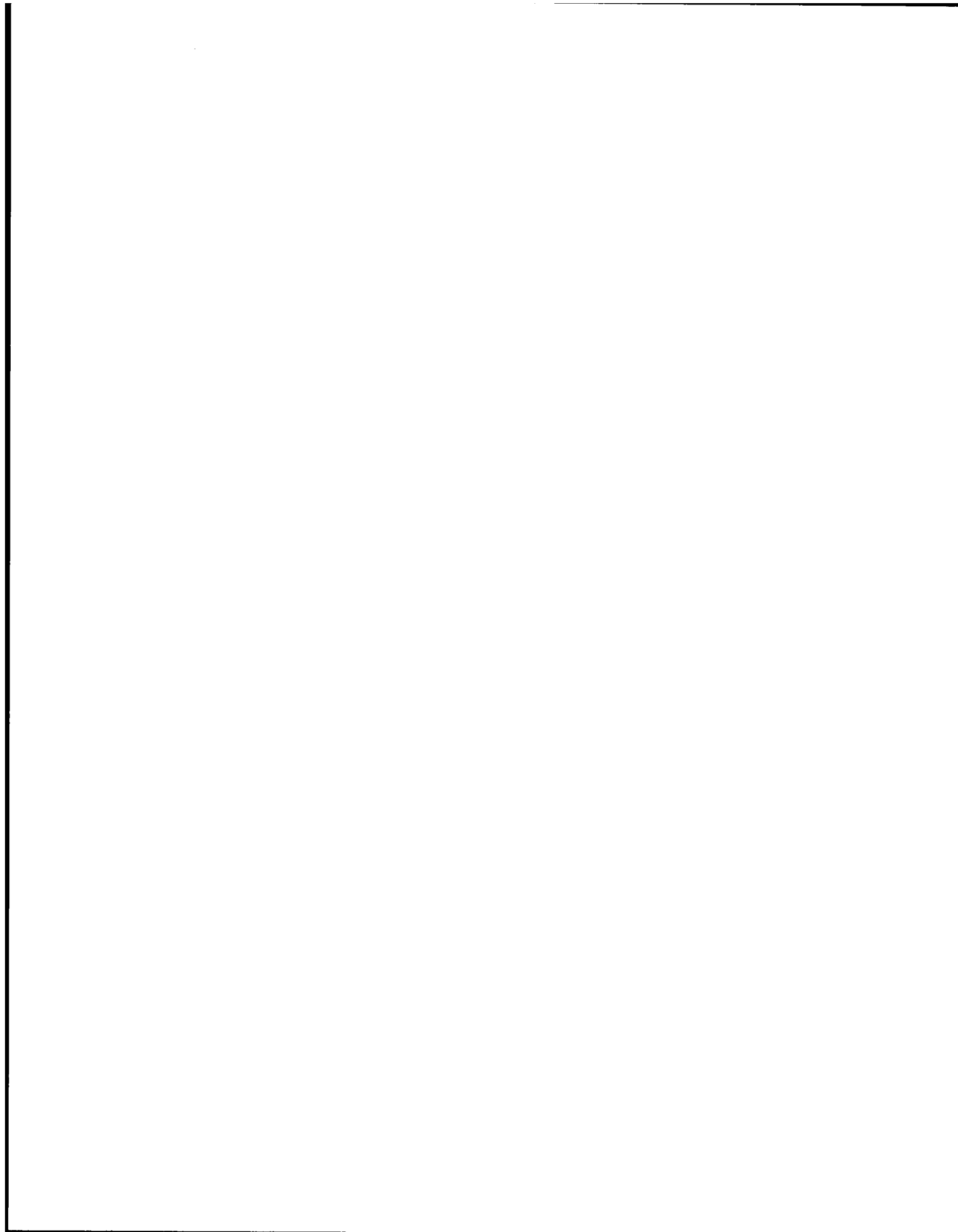
d. When fueling over wing, the nozzle will be bonded with a nozzle bond cable having a clip or plug to a metallic component of the aircraft that is metallically connected to the tank filler port.

e. Bonding and fueling connections will be disconnected in the reverse order of connection.

f. Entrances to fueling areas will be posted with "NO SMOKING" signs.

g. Open flames and lighted open flame devices will be prohibited on aircraft servicing ramps or aprons and in other locations within 50 feet of any aircraft fuel servicing operation or fueling equipment.

h. Extinguisher requirements for aircraft fueling operations shall be in accordance with references (g) and (h).



15 MAY 2001

CHAPTER 14

FIRE PROTECTION AND PREVENTION FOR SHIPS UNDERGOING

AVAILABILITIES IN THE SHIPYARD

1401 GENERAL

This chapter is established to prevent fires aboard ships, or, if they occur, to minimize loss of life and injury to personnel; damage to material and equipment; and interruption to the industrial and ship's work schedules, and is site specific to Norfolk Naval Shipyard. Fire protection and prevention standards for this site-specific chapter shall utilize NAVSHIPYDNORINST 11320.4 (series).